

\*

UMASS/AMHERST

\*



312066 0324 9168 8






University of  
Massachusetts  
Amherst

L I B R A R Y





Digitized by the Internet Archive  
in 2012 with funding from  
Boston Library Consortium Member Libraries



# Information Technology

A News Bulletin From The Executive Office For Administration & Finance, Information Technology Division

GOVERNMENT DOCUMENTS  
COLLECTION

MAR 20 2001

## NEW CORPORATIONS DIVISION SYSTEMS REDUCE PAPERWORK AND INCREASE EFFICIENCY

Massachusetts  
Depository Corp.

The Secretary of the Commonwealth's Corporations Division is the repository for records of over five hundred thousand business and non profit corporations organized or registered to do business in the Commonwealth. In addition, the

Corporations Division maintains records for limited partnerships and business trusts. Limited liability companies, limited liability partnerships, service marks, trademarks, and uniform commercial code filings are also made with the Corporations Division. This means that the Division must currently deal with mountains of paper records. In addition, all of these records are microfilmed or fished and are available for public review. So on any given day, a visitor to the Division's office on the 17<sup>th</sup> floor of One Ashburton Place is bound

to see dozens of citizens sitting at computer terminals and microfiche viewers looking up corporate records and others waiting to have records copied at the Division's copy machine.

With all of these documents and the vast number of citizens coming to the Boston office to conduct document reviews, the Secretary knew there had to be a better way to do business, making it more efficient for the Division staff and their customers. Recently, the Division launched two new web based systems that make it easier to submit and review corporation annual reports and Uniform Commercial Code (UCC) filings.

### UCC

The UCC relates to the statute allowing creditors to protect their interest by making a filing with the Secretary of State's Office. Any creditor taking a security interest in a debtor's personal property usually will act to "perfect" his security interest. Perfected status confers upon the secured party the right to recover the value of his claim from the collateral. A security interest is perfected when the creditor has taken steps as required by Article 9 of the Uniform Commercial Code to give notice of his interest in the fashion required for the type of collateral in question. This requires the filing of a financing statement with the Secretary of the Commonwealth. Currently, that filing can only be done by mail or in person. Legislation has been filed that will allow for the electronic filing of this information.

It is hoped that the legislation will be passed this year. In the meantime, the Division has already taken steps to make it easier for citizens to review and obtain UCC information by providing a web based search capability that allows customers to view and print PDF versions of the UCC files at no charge. Previously, customers would have to go to the Division's public room in Boston, identify the information they needed, pull the film of the filing, put into the microfiche reader, make

## INFORMATION TECHNOLOGY BULLETIN VOL. 7 NO. 1, WINTER 2001

New Corporations Division Systems .....	1
DOR Introduces Three New Web Applications for Taxpayers ..	2
HIPAA Means Changes For DMA And Other Health Agencies .	3
New Systems Improve Operations at Correctional Facilities .....	4
Update on UMass IT Bond Projects .....	5
ITD Reorganizes Its Operations .....	6
HR/CMS Knowledge Center .....	7
MassCARES A Health & Human Services Initiative .....	8
Strategic Planning Updates .....	9
ITD Resources .....	10
Message From The CIO .....	12

Continued On Page 11



# DOR INTRODUCES THREE NEW WEB APPLICATIONS FOR TAXPAYERS

Just in time for the new tax season, the state Department of Revenue (DOR) has established three new web initiatives that make it easier for consumers to file and obtain tax information. The new initiatives include an application to file income tax over the web, one to review quarterly estimated payments and an application to review the status of refunds.

In a statement released to announce the new WebFile application, Massachusetts Revenue Commissioner Frederick A. Laskey encouraged taxpayers to electronically file (E-file) their state tax returns using the Department of Revenue's new WebFile application during the official kickoff for the 2001 tax filing season.

Enhancing taxpayers' ability to utilize the Internet to both access state tax information and to file their state taxes is the centerpiece of DOR's filing season initiatives.

"It has been our goal to make it easier than ever for taxpayers to comply with their state tax obligations. Our new WebFile application and other web-based resources are the focal point of this effort," Laskey said during the kickoff event at the Massachusetts Information Technology Center in Chelsea on January 15.

About 70 percent of all people who file returns receive a refund and the average refund is \$400. The advantage to taxpayers who E-file their returns is that they can get their refund much quicker.

"We have one of the fastest refund turnaround times in the country," Commissioner Laskey said. "We can get a refund back to a taxpayer who files electronically in 3.1 days. And when the taxpayers uses direct deposit it's almost numbing how fast we can turn it around."

WebFile enables taxpayers and tax practitioners to prepare and file a return, at no cost, via [www.massdor.com](http://www.massdor.com). WebFile is available using any computer with Internet access, and without having to download special software.

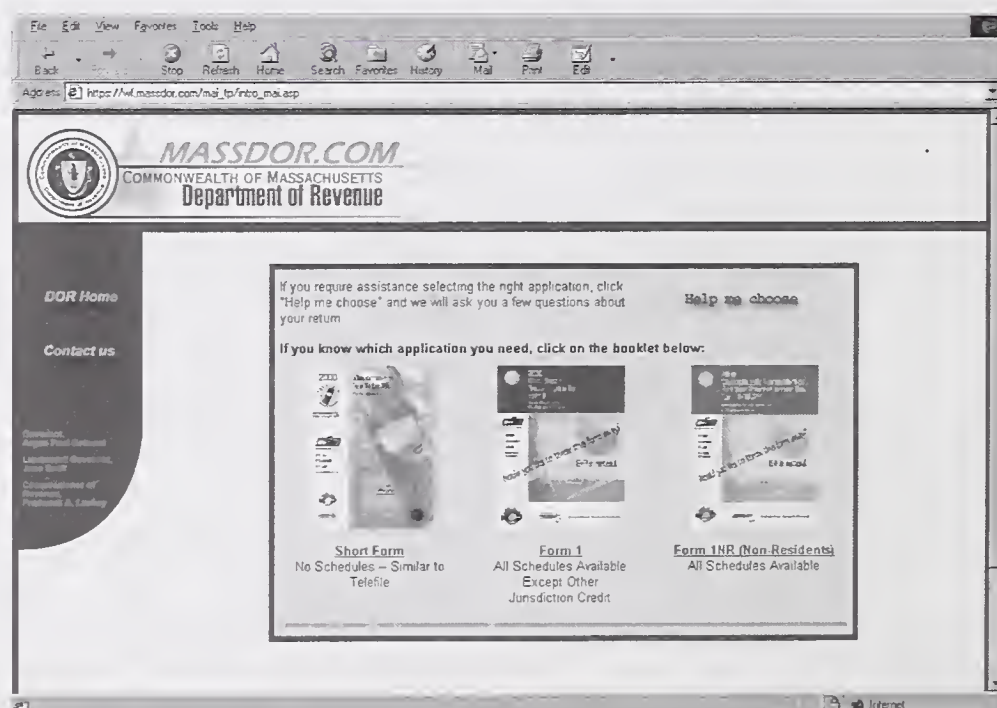
In addition to WebFile, DOR has also made it easier for tax payers and practitioners to obtain tax

information via the web. For example, users can check on their quarterly tax payments and estimates. By simply entering their social security number and a PIN, they can view and/or verify any estimated tax payments they may have made to the DOR.

Taxpayers can also check on the status of their refund by utilizing the DOR web page. Again, by simply entering their social security number, the tax year for which the refund was requested and the requested refund amount, users can find out when the tax return was processed and when the refund was sent. This popular option has been in place as a telephone-based system for the past two years and has now been upgraded to the web.

These new web enhancements continue DOR's efforts to provide easier access to consumers. "Our website at [www.massdor.com](http://www.massdor.com) has become the backbone of our services for taxpayers, providing one-stop shopping for state income tax needs and allowing access to a wealth of tax information any time of day or night," Laskey said.

Taxpayers now have more options on the Web.



# HIPAA MEANS CHANGES FOR DMA AND OTHER HEALTH AGENCIES

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) created a number of sweeping reforms to the way health insurance coverage is delivered and reported in the United States. Included among the many reforms to the health insurance industry, Medicaid and Medicare, were requirements mandating administrative simplification, electronic data interchange and health information privacy.

For the Commonwealth's Division of Medical Assistance, the Administrative Simplification provisions of HIPAA are intended to reduce the costs and administrative burdens of health care by making possible the standardized, electronic transmission of many administrative and financial transactions that are currently performed manually on paper.

For example, the Act:

- Requires health plans to send and receive enrollment transactions electronically;
- Creates industry-wide standards and enables the transfer of electronic data;
- Mandates a level of simplification through the creation of industry-wide standards;
- Allows the cross-sector and cross-country comparisons of costs, as well as fraud and abuse detection;
- Requires high levels of privacy for patient information; and,
- Allows employees to move from one health plan to another without losing their benefits.

Agencies have a deadline of October 2002 to meet the requirements of HIPAA. To do so will require "more than minor surgery", according to DMA CIO Jack Hornfeldt. The Division of Medical Assistance is the single state agency in Massachusetts that administers Medicaid (Title XIX) and the Children's Health Insurance Program (CHIP and Title XXI). In Massachusetts, Medicaid and CHIP are combined into one program called MassHealth. Through MassHealth, DMA offers a broad range of health-care services by paying for part or all of a MassHealth member's health insurance, or paying medical providers for services given to MassHealth members.

DMA processes over one million claims per week, totaling more than \$5 billion annually. Mr. Hornfeldt said that DMA must make major changes in both its business processes and data systems to conduct transactions and accommodate the new national standards required by the act. Specifically, the Department will need to upgrade its systems to handle the changes between the old and new data requirements.

When those changes and upgrades are in place, DMA will see benefits in cost savings and administrative efficiency. For example, it is estimated that 26 cents of every dollar spent on health care goes to administrative costs. The new standards set by HIPAA will help reduce those costs by half.

Mr. Hornfeldt said that DMA staff has already begun to identify tasks, make plans and put together funding requests to implement the changes required in the Act. He is also working with DMA's business partners and sister agencies such as DSS, DYS, DTA and the Soldier's Homes to coordinate their efforts to meet HIPAA requirements.





# NEW SYSTEM WILL IMPROVE OPERATIONS AT CORRECTIONAL FACILITIES



The Massachusetts Department of Correction (DOC) is responsible for over 10,000 inmates in 23 facilities across the Commonwealth. The growing inmate population, combined with the increasing need to maintain more detailed information about each offender requires a more sophisticated method of record keeping. Additionally, because the DOC's facilities and support divisions are spread over a wide geographic area, it is impractical for staff to conduct their work on the Department's current independent and isolated computer systems.

In May of 1996, the DOC conducted a Reengineering study examining the inmate reception process. The resulting report caused the Department to undertake an initiative to develop long-term solutions to process problems within the DOC. A Reengineering Task Force was appointed and met from October of 1996 through June of 1997 to expand upon this study and review the agency as a whole. It made recommendations to improve the Department's business process, which provided a foundation for the development of an automated Inmate Management System (IMS).

The Inmate Management System (IMS) is a centralized database that will be accessed from the network and is extensive in scope. Information modules developed in the database include: inmate demographics, criminal records, disciplinary information, program needs assessment and planning, escape information, date computation, and housing information. The ability to maintain this large volume of inmate data on-line will enhance security and classification functions, promote both internal and external communication, and create a better tool for research and trend analysis.

Over the past two years, the DOC has worked on the development of the new IMS and implemented a pilot program for testing and acceptance of the system in September of 2000. MCI Framingham was selected as the pilot site based upon the manageable size of its population and its role within the DOC's organization of facilities. MCI Framingham serves as the reception center for women sentenced to county and state sen-

tences. At the reception center, inmates undergo a thorough assessment of their criminal history and their programmatic needs.

User acceptance during the pilot program was rated as "very good" among the staff at the facility. With the successful pilot rollout in Framingham, the next step in the program will be at MCI Lancaster. MCI Lancaster serves as a minimum-security placement and a pre-release center for males and females who have served a significant portion of their sentence and are preparing for eventual release into the community. Each site will develop offender records, which will be updated and managed by the Inmate Management System. This will test all the modules of the IMS application.

DOC IT Director Paul DiPaolo said that in addition to vastly improving internal operations, the systems show great promise in managing the planned release of inmates back to the community. The system will track release dates, identify program needs for inmates preparing to re-enter the community and track their rehabilitation progress once they are released.

The IMS system is also designed to share information with other agencies. It is anticipated that, over time IMS will link up with other criminal justice agency's databases including the State Police, the Massachusetts Trial Courts, and the county Houses of Correction. On a national level, the IMS is designed to support the Commonwealth's efforts to meet Triple I [Interstate Identification Index]/NCIC 2000 standards, which shall be required for participation with the Federal Bureau of Investigations and Criminal Justice Information System's (CJIS) data warehouse.

Currently, the state has invested approximately \$14 million in the design and creation of the system. Mr. DiPaolo estimates that an additional \$8 million will be needed to upgrade the necessary infrastructure at all of the DOC facilities to complete the rollout.

Mr. DiPaolo said that moving forward is now more related to funding issues than technology but he envisions the day when all of the Commonwealth's correctional facilities and public safety agencies are tied together, sharing information on a daily basis.



# UPDATE ON UMASS IT BOND PROJECTS

## THE MASSACHUSETTS INFORMATION TURNPIKE INITIATIVE (MITI)

### *Low-Cost T-1 Lines share Internet and Interactive Video Service*

One of the benefits of the Massachusetts Information Turnpike Initiative is how investments in network upgrades are put to use as soon as they come on line. One of those initiatives was converting most of the MITI network to ATM (Asynchronous Transfer Mode) – digital switching service.

ATM gives MITI an economic advantage by allowing multiple levels of control over bandwidth priorities and uses. ATM overcomes the problem of unpredictable network response times from router-to-router and client-to-server by guaranteeing quality-of-service delivery so that priority network traffic can be defined within one or multiple physical networks. Interactive video and some client-server applications require such quality of service.

Most MITI customer sites now use ATM network services. MITI's internet and interactive video service can be shared over a single, low-cost, 1.4 Megabit per second clear channel T-1 line. For MITI customers who use more video and data, multiple T-1 lines can be bundled together through the use of ATM inverse multiplexer interfaces. These options are now being explored by UMass campuses to extend their on-line programs to state and community colleges. From Cape Cod to the Berkshires, some state and community colleges intend to use this network service to offer enhanced training programs via video and internet on-line curricula to area high schools.

## DISTANCE LEARNING

This project calls for the development of a system-wide distance learning capacity across all five UMass campuses which would promote academic resource sharing, improve teaching and learning options for university students, and expand UMass' ability to serve a variety of constituencies across the state. This initiative would establish several "virtual classrooms" on each campus and at selected sites around the state. It would also create an infrastructure for online (Internet-based) distance learning courses.

The following projects have been implemented:

- A minimum of two distance learning classrooms per campus have been created, along with a distance learning classroom at the President's Office in downtown Boston. All classrooms are completely

compatible with each other and use MITI for a high quality audio and video signal.

- Two distance learning classrooms were established at the I-495 Center for Professional Education, which currently provides multi-campus collaborative programs in information technology and management. Distance learning classrooms were funded at the Amherst and Lowell campuses to support delivery of distance learning courses to students participating in these programs.
- Professional development opportunities were provided for twenty-five faculty in the disciplines of Marine Science, World Languages, Nursing, Management and Business to learn the pedagogy of distance learning via interactive video.
- A network of videoconferencing facilities was implemented on the five campuses to facilitate collaboration by faculty on courses, programs and research. These facilities also serve as classrooms for small seminars.
- A small computer laboratory was developed in a distance learning classroom on each of the four undergraduate campuses to support courses which require in-class computer work by students.
- The distance learning infrastructure at the UMass Medical Center was enhanced to support distance learning for medical students participating in their clinical instruction in facilities around the state and who are unable to return to campuses for onsite classes.

The goals in FY 01 are to establish a more comprehensive infrastructure for the delivery of online (internet-based) courses, thereby creating an infrastructure to support the University's growth in the online distance learning market.

## THE DIGITAL LIBRARY

The libraries of the University of Massachusetts propose to offer services and information to students and broader user communities through the creation of a shared digital library. A digital library includes such components as electronic resources, information literacy instruction, electronic delivery of content and online information support. In FY 01, plans include Web site/Portal development and server, an information literacy tutorial for use from a portal, digitization projects on each of the five campuses and integration projects.

---

# ITD REORGANIZES ITS OPERATIONS

---

To position itself better to support Internet based electronic government initiatives, ITD has reorganized its operational bureaus, the Data Center Service Bureau (DCSB) and the Communication Services Bureau (CSB), into one organization: ITD Operational Services under the leadership of Ralph Ragucci, former DCSB Director. According to Mr. Ragucci: "Today's technology requires platform and network support staff to work as a team, planning, implementing and performing appropriate services for our clients. An integrated operations group that works together to establish standards, to support new initiatives, and to develop appropriate services is essential for ITD to meet its business objectives."

The new organization has five sub-organizations:

1. The **Customer Service** group has Business Relationship Managers handling first level consulting with customers to do joint planning between ITD and customers, to develop service level agreements, to manage project implementations, to assess service delivery, and to act as customer ombudsmen. Also in the Customer Service group are several Customer Service Coordinators under the leadership of Dennis Warren. This staff coordinates support for: mail, directory services, online government initiatives, network support whether TCP/IP or SNA, Remedy support, and consulting for technical support.
2. The **Enterprise Infrastructure Management** group is headed by Deputy Director Lou Macinanti. Enterprise Systems Services, under Bill Bates, covers enterprise servers (formerly known as mainframes) and their associated services such as operating systems, data base administration, data management, system performance and system communication. Midrange Systems Services, under Dom Musto, covers database administration for Oracle, SQL and TextDBMS; operating systems administration for UNIX and Windows NT; Active Directory support; and system management tools. Network Engineering, under Rich Glasberg, covers network engineering and management and IP address administration. Project Management has two senior staffers to manage the implementation of major initiatives, such as VPN.
3. The **Enterprise Operations** group includes Output Services under Jack Shea covering Ashburton Mail, MITC Printing, MITC Mail, and Forms Design. Computer Operations under Ken Travis includes Production Control, Command Center Services, Facilities, Asset Management, Quality Control and Administrative Services, and Registry Support.
4. The **Technology Planning** group will require the ability to anticipate new applications and the infrastructure and technology changes that might impact these applications. It will also require awareness of the benefits of new technology to know which technology components might be right for specific agencies or general state deployment. This group includes R&D Planning under Jeff Flannery and Yanli He and will handle enterprise utility architecture development; work closely with the Business Relationship Managers and Strategic Planning Liaisons in planning for new customer initiatives; and work closely with the Enterprise Applications Bureau on interoperability issues. Telecom under Frank Burns includes Voice/Data Support, Voice/Data Billing, Voice/Data Procurement, and Tenant Switch Management.
5. The **Enterprise Security** group is headed by Dan Walsh. It includes Information Security under Dick Bianco covering data access and authorization. Jim Wentzel will manage WAN Security; this includes Security Operations, Application Development for EGov, and Gateway and Resource Development such as DMZ, DNS and Firewalls. Enterprise Gateway Security will be managed by Donna Smith; this includes gateways into directories and gateways into messaging. A manager for Policy, Audit and Enforcement is being sought.

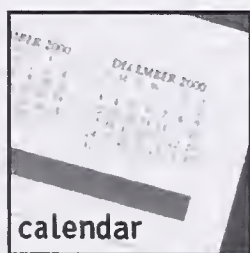
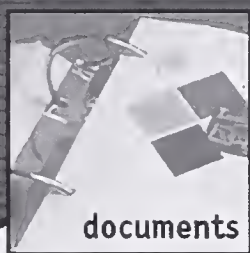
The data center concept will be expanded to include facilities at both One Ashburton Place and MITC. According to Ralph Ragucci: "The realignment of operational support within ITD is long overdue. We look at this integration as an important, necessary step in improving service to our customers. Internal processes and procedures will be streamlined. The resultant strengthening of the ITD team concept will simplify lines of communication, providing cleaner and clearer channels for customers and staff alike."



## The Problem:

# HOW CAN HUNDREDS OF END USERS ACCESS AND SHARE KNOWLEDGE ABOUT HR/CMS?

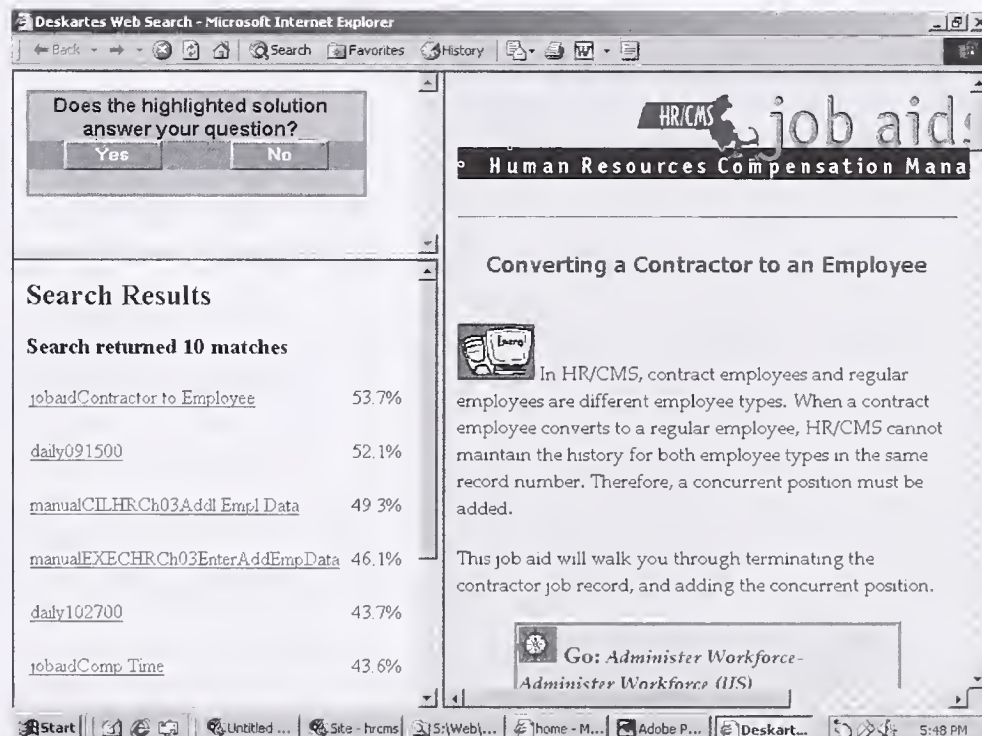
## The Solution:



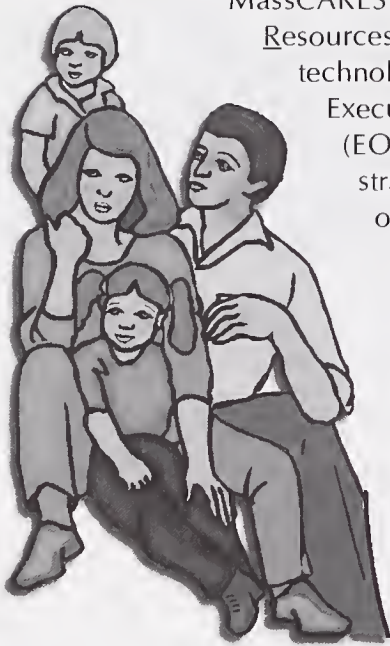
To use the knowledge management system, visit the website at [www.hrcms.state.ma.us](http://www.hrcms.state.ma.us)

In January of 2001, the HR/CMS Change Management Team in conjunction with ITD CommonHelp implemented Deskartes Knowledge Management Software on the newly designed HR/CMS website. This software leverages the "intellectual capital" of an organization to the benefit of all users. HR/CMS users can now access and retrieve knowledge through natural language queries.

If an HR/CMS user has a question, he/she types the question in the "What's your question?" field. The knowledge management software searches through all of the documents in the database to find the answer. A list of documents that answer that question appears. Knowledge management software eliminates endless searching through document after document to find the answer.



# MassCARES - A HEALTH AND HUMAN SERVICES INITIATIVE



MassCARES (Massachusetts Confidential Access to Resources through an Electronic Storehouse) is a technology-based initiative of the Massachusetts Executive Office of Health and Human Services (EOHHS). It incorporates a five-pronged strategy developed to enhance the delivery of human services, built upon the successful experience of the collaborative juvenile justice model piloted in Boston in the early 1990s. (In response to the increasing youth crime in the early to mid 1990s, the Secretary of Health and Human Services William O'Leary, then Commissioner of the Department of Youth Services (DYS), became deeply involved with law enforcement officials and other leaders of youth-serving institutions in a coordinated, cooperative effort to battle a rising juvenile crime problem. The approach, which

involved the manual integration of multiple agency information, and coordination and targeting of cross-agency services, resulted in a dramatic reduction in youth crime.)

The five elements of the MassCARES strategy include a process to:

1. Analyze Data;
2. Share Information (across agencies and levels of government);
3. Target Strategies;
4. Collaborate and Leverage Resources; and
5. Track and Monitor Results.

Technology is now at a point where it can address the historical limitations of EOHHS agencies and their many programs. These limitations include complicated access for consumers, a fragmented service system, lack of uniform monitoring and evaluation capacity, lack of ability to provide information and analysis on the local (community and neighborhood) level, and no recognition that current investments (spending) can leverage additional resources.

With the development of MassCARES, EOHHS is formalizing a system, utilizing the five-pronged strategy indicated above, that will be able to identify risk factors for childhood well-being; target services and resources

to support children and families; and track the effectiveness of these services over time. In addition to its use by EOHHS agencies, MassCARES will also be a resource accessible to individual communities, affording them an opportunity to similarly target additional resources for those most at risk of negative outcomes.

MassCARES includes the following technological initiatives:

- (1) A Central Information Storehouse (based on EOHHS's effort to construct a single database providing an unduplicated count of all consumers across all 15 of its agencies);
- (2) An On-Line Analytical Processing (OLAP) tool providing an ability to access and analyze client and service data in a user-friendly way to improve planning and evaluation; and
- (3) A variety of web-based service tools that will redefine how citizens relate to government and access services.

One such service tool is the Resource Locator providing online search capability for community-level resources for citizens and third party intermediaries. Another tool is an Eligibility Wizard that will analyze a consumer's demographic data to provide information on the services or programs for which a consumer may be eligible. In addition, prototypes are being developed on client referral, case monitoring, and risk factor reporting tools.

Functional releases of the Central Information Storehouse, the Resource Locator and the Eligibility Wizard are expected sometime during the second quarter of 2001.



# STRATEGIC PLANNING UPDATES

## STATUS OF E-GOV INITIATIVE

The Steering Committee of the Massachusetts Electronic Government Task Force met on December 21<sup>st</sup> to review the Policy Work Group recommendations and to prioritize the recommended projects that need to be analyzed further for incorporation into the Strategic Plan. Copies of the Workgroup final reports can be found at [www.state.ma.us/egov](http://www.state.ma.us/egov).

The sources for the candidate applications included the policy and technical interviews conducted specifically for the EGov initiative, the Investment Briefs submitted to ITD's Strategic Planning Group, the ITD web-based transactions survey, and focus groups (e.g., small businesses). The total of 215 initial candidate applications was ultimately reduced to 21 applications serving various constituent groups. These applications, listed below, are receiving further analysis before incorporation into the Strategic Plan.

The selection criteria used by the Steering Committee included: degree of transformation; number of agencies or customers affected and the value of the service; agency sponsorship; savings to the state; technology readiness; organizational readiness; among others. In prioritizing the list, balance was sought between constituent group categories; for example, between business and citizens; or between serving citizens in need and serving average citizens.

The EGov Strategic Plan, to be published in March, will identify three groups of E-Gov applications: those already online; "flanking programs" that are already under development; and new or enhanced EGov applications.

CATEGORY	HIGH PRIORITY	MEDIUM PRIORITY
	Portal Design and Implementation	
Shared Services	Commonwealth Security System Commonwealth e-Payment System e-Customer Relationship Management	GIS Enhancements
Serving Citizens In Need	MassCARES e-Child Support	
Serving Average Citizens	Online Teacher Certification SPORT Rollout Online Drivers License Lookup	Community Profiler Online Auto Excise Tax/Ticket Payment
Serving Citizens & Businesses	Consumer Licensing & Complaints Legislative Application	
Serving Businesses	Environmental Permit Applications Comm-PASS Enhancements	Online Criminal Record Checks e-Filing of Non-Profits' Financial Records
Serving Cities & Towns	Municipal e-Filing Executive Order 418 e-Filing	
	e-Gov Governance Structure	

## IT INVESTMENT PLANNING UPDATE

ITD's Strategic Planning Group (SPG) completed the mid-year review of IT bond-funded projects to determine if projects were on schedule, to identify any changes in funding that needed to occur, and to authorize funding for new projects. SPG authorized the release of quarter 3 funds and approved IT bond funding for seven new projects. Beginning February 1<sup>st</sup> all projects will be reviewed monthly to ensure maximum use of available funds.

Other investment activities include updating the Five-Year Capital Spending Plan submitted to the Fiscal Affairs Division (FAD), developing IT Bond III for consideration by the Legislature, and implementing the IT investment brief process for FY 2002. As in prior years, SPG liaisons will work with agencies to identify technology initiatives.

---

# ITD RESOURCES

---

## **EAB SHARED SERVICES UPDATE**

The Enterprise Application Bureau (EAB) is currently in the analysis phase of two new shared service applications, a Central Business Directory and an E-Payment Processing Application. These projects are being conceptualized to enable other e-government projects and to be easy "plug-ins" for various departmental initiatives that are being designed or planned.

The Central Business Directory will be a repository of key business data for all entities doing business with the Commonwealth and will provide a mechanism for sharing, rather than duplicating, data. Interviews with several departments have highlighted that many departmental applications require data on businesses that are currently being stored by other applications; a Central Business Directory would enable those departments to easily access this information and still preserve the ownership of departmental data. Additionally, businesses currently need to interface with many different Commonwealth departments; a Central Business Directory could act as a clearinghouse and publisher of data from businesses to departments (for example, Address changes).

The E-Payment Processing component will include an API (application programming interface) for departments wishing to incorporate one or many forms of e-payments (credit cards, debit cards, e-checks, etc.) in their applications. In the long run this will help in presenting the Commonwealth as a consolidated entity for e-payments by supporting the "shopping basket" approach. Additional advantages include centralized management and monitoring, flexible and enhanced reports to meet individual department needs, eliminate the need for multiple proprietary connections, payment processor changes and system enhancements that can be handled centrally and minimize impact on departments. In addition to enabling verification and settlement with payment processors, the application will have the ability to accommodate additional system defined/user defined data elements for interfacing with other Commonwealth systems (for example, MMARS).

For more information on these projects please contact [Mark.Heumann@state.ma.us](mailto:Mark.Heumann@state.ma.us).

## **MASSMAIL UPDATE**

The MassMail project is moving along at an exhilarating pace. The Charter Agencies are fully engaged in the

business of migrating their existing messaging and file/print services to the Windows 2000/Active Directory environment. These agencies (the Central Business Office, the Department of Environmental Protection, the Department of Social Services, the Executive Office of Environmental Affairs, the Information Technology Division, the Massachusetts Commission Against Discrimination, and the Office of Consumer Affairs) include approximately 6400 users and a diverse mix of networking and messaging services. However, by June 30<sup>th</sup>, they all will be enjoying the enhanced features of the Windows/Exchange 2000 environment.

To date, these agencies have been busy hiring system integrators to perform their migration, identify / validate communication circuit requirements, identify agency resource training requirements, recommend new hardware, and otherwise position themselves for a successful implementation effort. By the time you read this, these agencies and their integrators will be well along the way with their assessment phase of the migration. In February, ITD was the first agency to fully migrate to the new environment, and it will function as a production pilot for the Charter Agency's migrations starting in late March. As the ITD pilot continues into March, the Charter Agencies will continue to work with their integrators in the design and testing phases for their respective migration projects.

The implementation of Windows 2000 and Active Directory is a step toward an Enterprise-wide solution that will support the upcoming eGovernment initiative. The Charter Agencies for the MassMail migration project in conjunction with their integrators and Microsoft Consulting Services will create the "boilerplate" for other Commonwealth agencies to follow in future migrations.

Updates on the MassMail project are provided at the monthly IT User Group meetings and on the MassMail web site at <http://massmail.itd.state.ma.us>. If you would like additional information about MassMail, please contact Chris Edris at (617) 626-4530, [Christopher.edris@state.ma.us](mailto:Christopher.edris@state.ma.us).

## **COMMONHELP UPDATE**

As new technology projects are implemented in the Commonwealth, CommonHelp has taken on additional support roles. Procedures and technical resources have been established to provide support for four exciting new projects: VPN, Email, MassMail, and Knowledge Management.



---

# ITD RESOURCES

---

CommonHelp has been working with CBO and ITD staff to provide the necessary tools to assist in resolving **VPN** problems/questions. Procedures and technical resources are now posted on the following internet site: <http://www.state.ma.us/cbo>.

Another new area of support is **Email**. Help Desk staff, trained by OSD, are now handling questions for the state's new online procurement system. A new menu option has also been added to the 800 number to enable reaching an analyst to respond to questions, including password resets, by pressing 2 then 5 on hearing the menu.

A third support function provided by CommonHelp is **MassMail**. Meetings have been held with Charter Agencies to discuss Help Desk models, and how CommonHelp can provide them with the best service possible. Analysts have been/will be attending Microsoft training to be prepared for questions.

**Knowledge Management** is the fourth new resource available to users. CommonHelp has been working with the HR/CMS Change Management Team to implement a knowledge base for HR/CMS questions. The following intranet site has been developed for HR/CMS users: <http://www.hrcms.state.ma.us>. Here, the user can ask related questions and review the document

results for the appropriate answer. Similar knowledge bases are being developed for other CommonHelp support areas. If having difficulty connecting to this site, please contact CommonHelp and press 1 to speak to an analyst. NOTE: VPN users must be connected in order to get to this site.

## OTHER ITEMS OF INTEREST

CommonHelp has established a Help Desk Manager's Executive Meeting, at which Help Desk managers throughout the state will meet to discuss Help Desk procedures, call tracking, and new technology in relation to a Call Center environment.

ITD is investigating the possibility of providing Remedy as a service for its customers. Remedy is an automated call tracking system utilized by many other Help Desks, including ITD.

CommonHelp can still be reached at **1-800-335-4702**, however new menu options have been added to route calls to the appropriate analyst. There is a continuous effort to improve on the quality of service. Please send an email to [bethann.foster@itd.state.ma.us](mailto:bethann.foster@itd.state.ma.us) with any feedback, suggestions or comments.

Continued From page 1, New Corporations Division Sysytems

copies and pay for those copies. All of that can now be eliminated through use of the web based application at <http://www.state.ma.us/sec/cor>.

## ANNUAL REPORTS

Each year, Massachusetts based corporations are required to file annual reports with the division. This means that at the end of the year, over one hundred thousand businesses must either mail in or personally deliver the paper forms to the Division's office in Boston. The Corporations Division recently launched a new system that allows businesses to file their annual reports on-line. Corporations can now go on-line at <http://www.state.ma.us/sec/cor>, and by entering a PIN and corporate identification number can fill out their annual report. All domestic profit corporations organized prior to November 15, 2000 have or will be mailed a letter indicating their CID and PIN. The form is very user

friendly and will bounce back to the customer if any information is incorrect. Users can also go on-line to make changes to the form when necessary.

Both web applications are based on the premise of creating a more efficient operation that make it easier to do business with government, while resulting in cost savings to the customer and the Division. The on-line filing acts exactly like a paper filing but with a number of distinct advantages. For example, there is no need to mail or hand deliver forms, delivery is faster, the electronic form validation process makes errors less likely, the forms are easier to complete and the electronic filing provides verification of delivery. The net result of these new applications is a more efficient, consumer friendly operation and much less paper.

New on-line filing makes doing business with the Commonwealth easier.

## INFORMATION TECHNOLOGY DIVISION

One Ashburton Place, Room 801  
Boston, MA 02108

The Information Technology Bulletin is a quarterly newsletter of ITD's Strategic Planning Group. One of the SPG's tasks is to act as a clearinghouse for IT information. This publication furthers that goal. Please send correspondence to Managing Editor, Elaine Socha, the Information Technology Bulletin, Room 801, One Ashburton Place, Boston, MA 02108

Voice: (617) 626-4425  
FAX: (617) 727-3766  
Email: Elaine.Socha@state.ma.us

This publication is available on the public Internet at  
<http://www.state.ma.us/itd/publications.htm>,  
and on the state's intranet at  
<http://www.itd.state.ma.us/publications.htm>.

Next Publication: Spring 2001

Presorted  
First Class  
U.S. Postage Paid  
Permit No. 2226  
Worcester, MA

\*\*\*\*\*SNGLP

SNGLP

Richard Adams

UMass - W.E.B. DuBois Library  
GOVERNMENT DOCUMENTS  
AMHERST MA 01003



Printed on Recycled Paper

If any part of the address on this newsletter is incorrect, mark the changes on a photocopy and send or fax the copy using the information in the upper left.

## A MESSAGE FROM THE CIO

The door is open!

Having been hired to develop a strategic plan for electronic government in Massachusetts, Accenture (formerly Andersen Consulting) has introduced an evaluation process into our deliberations that forces us to consider business cases and metrics for evaluation. Although the questions asked may be phrased in terms different from those we've heard or used before, we still recognize the questions. We need to make sure that our business colleagues and policy makers recognize the importance and seriousness of the process as we will be incorporating it into the Investment Brief process.

We have strong support for this effort at the highest levels in Massachusetts government. It is a time of great opportunity. Insure your agency exploits this opportunity — make yourself heard at every opportunity. While ITD is, and will continue to be, heavily involved in the process, we are not driving the content: the Task Force Work Groups and the Steering Committee of the Task Force are.

Once the Task Force publishes the EGov strategic plan, we will be hiring a vendor to develop an Internet based Portal for businesses and citizens to use for conducting their business with the government. This is a very big deal — and we are going to live with the results for a long time.

The EGov initiative is focused on the creation of an Enterprise view of government. Participants should concern themselves not only with their own agencies' needs and their constituents' needs but also with those of Massachusetts government in general. This is an opportunity to have a big impact and for everyone to benefit.

Come on in!

David Lewis

Publication Number 18282, approved by Commonwealth of Massachusetts State Purchasing Agent, Philmore Anderson III.



# Information Technology

A News Bulletin From The Executive Office For Administration & Finance, Information Technology Division

GOVERNMENT DOCUMENTS  
COLLECTION

SEP 04 2001

## Mass.Gov PREVIEW SITE LAUNCHED, PORTAL IN DEVELOPMENT

University of Massachusetts  
Depository Copy

"Mass.Gov" was announced as the brand name for the new Massachusetts' EGov Portal at the final meeting of the EGov Task Force in March. The enterprise-wide portal will be the gateway to integrated government services organized around customer needs and will eventually replace the existing state web site. Its launch is scheduled for this fall. While the portal is in development, [www.Mass.Gov](http://www.Mass.Gov) will serve as an informational preview site to build brand awareness of Mass.Gov, inform the public about what the portal will be, and solicit opinions on service preferences and usability features.

Following the announcement of the Mass.Gov site, a vendor was selected to develop the Massachusetts Enterprise Portal. Some of the basic elements of Massachusetts' Portal vision are:

- Taking an *enterprise* view of government that integrates services across government structures and is not limited by branch, secretariat, or other organizational boundaries.
- Designing a *customer-centric* enterprise portal based on customer needs that is convenient and easy to use, and presents a common look and feel and consistent navigation across agencies.



*Paul Cellucci, Former Governor; Steve Crosby, Secretary of Administration & Finance; Peter Foreman, Former Undersecretary of Administration & Finance at the March Task Force meeting.*

- Offering *intentions-based transactional* services, organized by *virtual agencies*, or groupings of services that are clustered into easily recognizable topics, (e.g., Family & Health, Motor Vehicles, Consumer Services, Starting a Business, etc.) that will integrate the services of various agencies, enabling the completion of multiple transactions with multiple government entities seamlessly.
- Including *shared services* (ePayments, Security, Customer Relationship Management, and Geographic Information Systems) to achieve economies of scale and enable standardization of routine transactions, such as one-stop-shopping using a shopping cart metaphor.
- Incorporating *features* that go beyond those of ordinary web sites (such as Collaboration, Personalization, Search, and decentralized Content Management).

After the Portal Foundation has been established, it will be possible to integrate agency applications and back end systems.

## INFORMATION TECHNOLOGY BULLETIN VOL. 7 NO. 2, SPRING 2001

Electronic Government News .....	1-3
Clean Elections Law Mandates Electronic Filing .....	4
CAMIS Implementation Well Underway .....	5
DMR Plans New Information Tracking System .....	6
Introducing ITD General Counsel Linda Hamel .....	7
HR/CMS Training For 8.0 Moves To The Web .....	8
IT Investment; MassMail Is Up And Fully Functional .....	9
ITD Resources .....	10-11
Message From The CIO .....	12



## EGOV TASK FORCE PUBLISHES STRATEGIC PLAN & ROADMAP

In September 2000, then Governor Paul Cellucci and Lieutenant Governor Jane Swift formed the E-Government Task Force, a 75-member public-private collaborative effort to develop the vision and strategy for the Commonwealth's EGov future. In addition to Cabinet Secretaries and Department Commissioners, the Task Force was comprised of leaders from the other branches of Massachusetts' government and the Constitutional Offices, as well as representatives from cities and towns, businesses, consumer organizations, and academia. The Task Force, its Steering Committee, Work Groups, and the EGov team in the Information Technology Division's



*Bob Durand, Environmental Secretary; Fred Laskey, Revenue Commissioner; Dan Grabauskas, Registrar of Motor Vehicles; and Jennifer Davis Carey, Director of Consumer Affairs & Business Regulation discuss EGov strategy.*

Strategic Planning Group met many times over the next few months. Accenture (formerly Andersen Consulting) was engaged to evaluate the existing environment, assess Massachusetts' readiness to take its services more fully online, and develop the Strategic Plan and Roadmap to accomplish that. The Plan is available at <http://www.mass.gov>.

Governor Cellucci opened the March EGov Task Force meeting, thanking the Task Force, Steering Committee and team members for their work in developing the eStrategy. The Governor said, "Massachusetts should be number one in the country, doing a more effective job serving the citizens of this state while spending less of the taxpayers' dollars." He added that although this was the last Task Force meeting, the work was far from over. "We still have to implement the eStrategy throughout state government which is going to take some time. Lieutenant Governor Jane Swift and I are prepared to dedicate significant resources now to save money in the long run."

Administration & Finance Secretary Steve Crosby added, "Committed leadership from the top is crucial for something like this to move forward." Secretary Crosby emphasized that the private sector has seen huge non-inflationary productivity gains brought about to a great extent through the use of information technology, creating the extraordinary economic boom of recent years. But, he pointed out, "Government has not achieved these benefits yet. We want to use electronic government to transform government services; to reorganize virtually to provide more integrated services." Secretary Crosby is convinced that, "If state government increases productivity, then the general economy increases productivity. It makes Massachusetts more competitive in attracting and retaining business."

## FIRST APPLICATIONS SELECTED FOR PORTAL

The Strategic Plan and Roadmap recommends that eleven new e-Applications be developed for the Portal to serve a range of customer groups. These eleven programs, along with 31 programs already under development, will be the initial services offered through the portal. The Portal will also link to existing e-government applications.

### PROGRAMS SERVING CITIZENS

- **MassCARES:** Facilitates common casework tasks for social workers and enables consumers to locate programs and resources online.
- **eChild Support Enforcement:** Facilitates child support payments by non-custodial parents, including auto-withdrawals and direct deposits.
- **Online Teacher Certification and Recruitment:** Simplifies the cumbersome and paper-intensive teacher certification and re-certification process. Includes postings of open teaching positions throughout the Commonwealth.
- **SPORT (Online Recreational Licenses):** Creates a convenient, one-stop shop for consumers to purchase or renew recreational permits.

### PROGRAMS SERVING BUSINESS

- **Drivers' Record License Look-up and Notification:** Allows individuals or authorized employers to look-up the driving record and license status online, and to be notified of any status changes.
- **Professional License Renewal & Online Complaint Submission:** Gives consumers, businesses and professional service providers the ability to quickly and efficiently conduct professional license lookups, submit complaints and renew professional licenses.



- **Online Submission of Applications for Environmental Permits & Certifications:** Enables businesses to apply for and renew environmental permits and licenses.
- **Comm-PASS Enhancements and eProcurement Portal:** Creates a fully integrated, automated procurement process for all entities eligible to use state contracts (i.e. municipalities, non-profits, institutions of higher education) as well as for private companies doing business with the Commonwealth.
- **CORI Automated Screening System (CASS):** Creates a one-stop shop for multiple sources of criminal information online for authorized users.
- **eFiling of Non-Profit Financial Reports:** Provides an integrated process for submitting financial and performance information for non-profit organizations.



*David Lewis, CIO; Eric Berman, Deputy Comptroller; Barbara Mirabello, Comptroller's Office look ahead to transforming government services.*

#### **PROGRAMS SERVING CITIES AND TOWNS**

- **Municipal E-Filing (Educational Grants and EO 418 reports):** Enables municipal employees and officials to complete a range of routine transactions with the Commonwealth online.

#### **EGOV WILL TRANSFORM GOVERNMENT SERVICES**

The Commonwealth has an extensive web presence, has more online transactions than any other state, has won numerous awards for its online services, and gets about 3.3 million visits a month. However, on the continuum of eGovernment capability – Publish, Interact, Transact, Integrate, Transform – Massachusetts is only starting the “Integrate” phase. The Portal will facilitate the integration of applications across organizations and the integration of web transactions to the back-end systems. Once integration is successful, Massachusetts will begin to see the transformation of government services and realize the full economic benefits of electronic government.

Transforming government service will break the traditional service model where citizens and businesses typically get government services by interacting with a small number of customer facing or government field workers. These workers then communicate with a host of back office workers who interact with the agencies’ information technology systems. The EGov Transformation will allow citizens and businesses – and government customer facing and field workers – to interact directly with the IT systems. Customers become “deputized state employees.” They can serve themselves on their own time, in their own venue, saving themselves time and travel. At the same time, resources can be shifted from the back office to the front lines to provide greater service to those customers who really need it.

This service transformation will also save time at the agencies and thus taxpayer dollars.

Some agencies have already achieved success in transforming services electronically. In the early 1990s, the recession and budget crisis forced the Department of Revenue to start cutting staff so that it now has 25% fewer FTEs than it did in 1990. Challenged to maintain customer service in the face of these cuts, DOR began adopting E-File in the mid-1990s. In 2000 E-File reached 26% of personal income tax returns. The time needed to process a tax return has fallen from 17.5 days in 1996 to 9 in 2000. DOR has improved service delivery with fewer people by using electronic filing.

The Registry of Motor Vehicles is another example of service transformation. RMV relaunched its web site in May 2000 with a series of new transactions (according to Accenture, the most transaction rich state government site in the country). Monthly transaction volume had bumped along below 5,000 for several years. With the new site, traffic has soared to around 34,000 a month. The Boston Globe (2/12/01) has been praising RMV’s customer service and sending “hosannas” to Commissioner Dan Grabauskas. Experience like this leads to an improved reputation for government.

Visit [www.mass.gov](http://www.mass.gov) for on-going updates regarding the development of the new Portal and EGov applications.

# CLEAN ELECTIONS LAW MANDATES ELECTRONIC FILING

The Clean Elections Law, which was passed by the state's voters last year, has created a number of changes in the way candidates can raise and spend money. The

law has also had a significant impact on how the state's Office of Campaign and Political Finance (OCPF) gathers and reports campaign finance information.

OCPF currently scans campaign finance reports for legislative and statewide candidates and

officeholders into their imaging system. The PDF images can be found on OCPF's web site at [www.state.ma.us/ocpf](http://www.state.ma.us/ocpf).

However, the new law mandates much more comprehensive electronic reporting requirements. OCPF is currently developing an Electronic Filing System (EFS), which is required to be up and running in 2002.

OCPF will include two ways to file electronic reports. The first method of filing requires a Microsoft Access-based software developed by OCPF called *Reporter 3.0*. *Reporter 3.0* balances requirements of campaign finance law (such as reminders when contributors exceed contribution limits) and committee friendly functions such as the ability to print custom reports and mail merge contributor's names and addresses.

*Reporter* will be distributed free of charge to campaign committees on CD in 3 different versions. One version will be for non-depository candidates including legislators, political action committees, ballot question committees and municipal candidates. Municipal candidates are not required to file electronically but may use *Reporter* to print paper reports. The second version, *Depository Reporter*, will be distributed to depository candidates including statewide candidates (Governor, Lt. Governor, Attorney General, Treasurer, Auditor and Secretary of State) and governor's councilors. The third version is for banks that file part of the report for depository candidates.

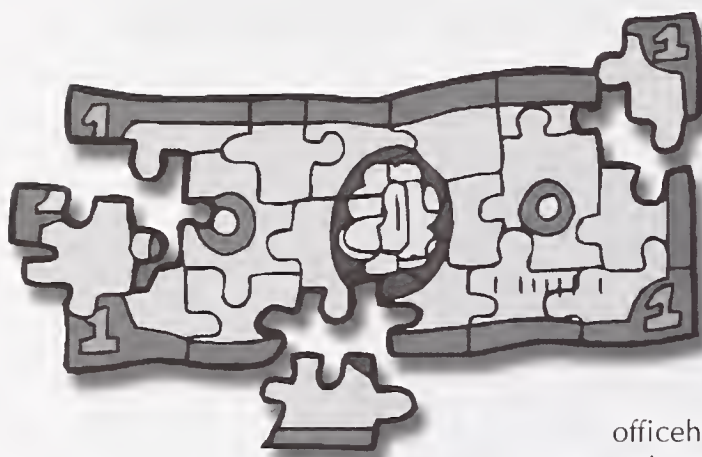
All of the electronic reports will be submitted via the Internet by *Reporter*, which creates an HTML web page. This web page will include the entire report's content, which is submitted to the web server. Candidates can also file electronic reports by logging onto OCPF's web

server and entering their data through a browser connected to the public Internet. This option is for smaller committees who don't want or require client software, Mac users and others who simply want a quick way to electronically file. This method will require candidates to enter their name and a password assigned by OCPF.

As soon as OCPF's Oracle-based database and web servers receive electronic reports, they will be available for public review. Current plans include searching contributions by candidate, town/city, office sought, etc. Once a particular report has been chosen, specific electronic information such as contributions or expenditures can be viewed. One feature that may be helpful to visitors is the ability to extract search results as delimited text files. For example, once a visitor determines a search criterion, such as a candidate's name, they then can choose a delimiter (tab, comma, etc.) and click a button to extract the search results for integration into a database or spreadsheet.

The database server will be housed at the Chelsea Data Center under ITD supervision and include Windows 2000 Server/Advanced Server as its operating system. Two IBM *Netfinity* web servers running Oracle's web server software with a load balancer will handle web functions. The database server will be based on Oracle 8i. Internally, OCPF will run SQL Server 2000 and IIS for an Intranet server, SQL Server will store some report information locally for staff use as well as OCPF's internal databases. This Intranet application will not only be available to OCPF staff but also to the public through terminals in OCPF's public office area.

OCPF is planning to put the EFS officially online during January 2002. Electronic reports will be accepted for the first time, filed by a small group of legislators for the year-end report for 2001. Statewide and Governor's Councilors will start to file monthly reports in early February for their January 2002 reports. By the fall of 2002, all legislators meeting a minimum threshold (e.g., \$1,600 for representatives) of money spent or raised will be required to file their reports electronically. Political Action Committees (PACs) spending over their threshold amounts will also be required to file their reports electronically. Ballot question committees will be required to file at some time further in the future.





# CAMIS IMPLEMENTATION WELL UNDERWAY

The Spring 2000 issue of the Information Technology Bulletin reported on a major initiative being implemented by the Division of Capital Asset Management to assist agencies in managing the Commonwealth's real estate holdings. The Comprehensive Capital Asset Management Information System (CAMIS) includes a condition survey of the state's capital assets (over 5,000 buildings, 77 million square feet of office space and thousands of acres of land) and a software package to manage the collected data.

Significant progress on the survey and the implementation of the software package has been made over the past year, as the following update indicates.

## CAMIS SURVEYS

The surveys of the state's capital assets were completed in April, 2001 by the engineering firm Parsons Brinckerhoff (PB). The data from the surveys will now be used to inform and support capital planning and budgeting decision-making. As part of the firm's quality assurance program, some sites will be selected for re-surveying. In addition, DCAM staff is spot-checking the survey data at other facilities.

As PB completed the surveys they also gathered other information that will populate the database, such as recommended preventive maintenance schedules and cost estimates for addressing the deficiencies identified through the surveys. When the data set is complete, the information will be transferred to the CAMIS software package that DCAM has purchased for all state facilities to utilize.

## CAMIS SOFTWARE

After customization, the off-the-shelf software developed by Prism Computer Corporation was delivered to the Information Technology Division (ITD) for installation at the ITD Data Center in Chelsea. ITD personnel have installed the software and are in the process of loading the survey data into the corresponding data fields. Prism will continue to make enhancements to the software until July, 2001 when final acceptance is scheduled.

## USER TRAINING

User training will begin upon software acceptance. Training for users of the CAMIS system will be scheduled when the database is populated and accepted by DCAM. Training sessions will be offered at different levels, depending on the type of user – facility executive, maintenance manager, or technician. Each user will be provided a password, depending upon the type of security level and usage privileges assigned by facility or department managers.

## USER ACCESS

The next steps with the software involve the mechanics of establishing user access to the CAMIS software application. DCAM staff will contact personnel at each facility to determine user security groups and associated passwords to access the CAMIS system. Passwords will only be provided to individuals who complete user training.

Because the CAMIS system will be located on the Commonwealth's wide area network, all users on that system will be able to access the program through their desktops. Users who are not on the wide area network, most notably, higher education institutions, will have to access the system via the Virtual Private Network (VPN) service provided through a state contract with Verizon.

"I have been gratified by the level of support and cooperation DCAM has received over the past several months as we have been working to complete the asset surveys and to roll out the software," said CAMIS Program Manager Hope Davis. "The data we receive will allow DCAM to prioritize and justify capital budget requests for equipment maintenance, repair and replacement. CAMIS will allow DCAM to now have the best possible information available when identifying the state's priorities for spending capital dollars."

---

# DMR PLANS NEW INFORMATION TRACKING SYSTEM

---



Last Fall, the Department of Mental Retardation (DMR) along with the Division of Medical Assistance (DMA), began a process of planning and designing a management information system that will systematize a great deal of information on the Department, its services, and the people it supports. The new system will be designed to meet the information needs of the DMR, the DMA, and other state and federal agencies. It will also allow provider agencies, families, and the people the DMR supports greater access to the significant amount of public information the DMR maintains.

"This is a significant undertaking," explains B. L. Hetherington, Assistant Commissioner for Management and Finance. "The DMR has made significant progress in recent years to integrate and upgrade computer technology to track data and maintain information. However a service system as complex and diverse as the DMR's that provides a wide range of services and supports in varied settings needs a more sophisticated approach to keep pace with the information needs of the 21<sup>st</sup> Century."

The DMR operates an extensive system of community and facility supports serving more than 29,700 individuals across Massachusetts. The DMR plans to create an effective management information system together with the DMA that will collect

all aspects of service delivery. It will track consumer data, trends, and outcomes. It will be able to share electronic data with other computer systems and more readily provide statistics to national projects that measure performance standards. The new system should also enhance communication between the DMR and private provider agencies.

The DMR together with the DMA has contracted with Systems Engineering, Inc., (SEI), a firm with 18 years experience in developing database management systems to study the requirements for the new information system.

"For several months, SEI coordinated a complex study. They interviewed and documented stakeholder requirements and evaluated our current information systems," states John Vasily, Chief Information Officer for the Department.

The planning phase for this project took five to six months to collect data, interview stakeholders, and come to a consensus on the best technology to serve the DMR's MIS needs.

This winter, the DMR worked with the DMA to submit an Advanced Planning Document (APD) for funding to the federal Health Care Financing Administration, (HCFA). When this federal agency approves the proposal, the design and implementation process will begin.



---

# INTRODUCING ITD GENERAL COUNSEL LINDA HAMEL

---



In January, 2001, ITD's long-vacant General Counsel position was filled by Linda Hamel. Linda, formerly the General Counsel for the Commonwealth's Division of Occupational Safety, was also a litigator for ten years working for large law firms and the Federal government, specializing in administrative law. She was also a member of the Policy

and Legal Framework Workgroup that made recommendations regarding the broad legal foundation for the current electronic government initiative. Her current responsibilities include providing legal counsel to ITD with respect to both its day-to-day operations and EGovernment. She is joined in the latter effort by Daniel Greenwood, ITD's Special Counsel for E-Commerce.

"The ITD General Counsel's position is one of the most exciting legal jobs in the Commonwealth today", Linda says. "The areas of law that touch on ITD's mission — intellectual property, privacy, electronic commerce — are changing rapidly and one of my jobs is to keep on top of those changes and disseminate information about them to ITD and to attorneys throughout state government." Linda has convened "CLEAR", the CyberLaw EGovernment Advisory Roundtable, a monthly meeting of leading attorneys from all three branches of state government whose goal is to develop best legal practices with respect to the legal questions generated by the Commonwealth's migration to EGovernment. CLEAR will tackle

challenging legal issues such as the impact of the Federal E-SIGN legislation on the authority of state agencies; the role of the Commonwealth's records retention, public records and privacy laws in the development of EGovernment; the development of "enterprise" security and privacy policies; guidelines for state agencies negotiating software and web development contracts; and the legal issues surrounding use of electronic signatures and records, among other topics. Linda is also doing outreach to the legal community on EGovernment and ITD legal issues through her work with the Legislature, communication with individual agency counsel, and the ITD General Counsel's web page, which is currently under development.

In addition, Linda will revise and add to ITD's current in-house policies, respond to requests for legal guidance from ITD managers, work with national groups such as the National Electronic Commerce Coordinating Council to develop a national consensus on best legal practices with respect to EGovernment, review ITD's software licenses and service agreements, and analyze national and state legislation affecting EGovernment.

"Practicing law is always a privilege", according to Linda, "but having the opportunity to work with ITD's creative and visionary technologists is the chance of a lifetime".

Linda can be reached at [Linda.Hamel@state.ma.us](mailto:Linda.Hamel@state.ma.us) or at (617)-626-4404.

## HR/CMS TRAINING FOR 8.0 MOVES TO THE WEB

The latest feature of the HR/CMS Knowledge Center is its eLearning series. The first course in the series Introduction to the Information Warehouse, went online in March, 2001.

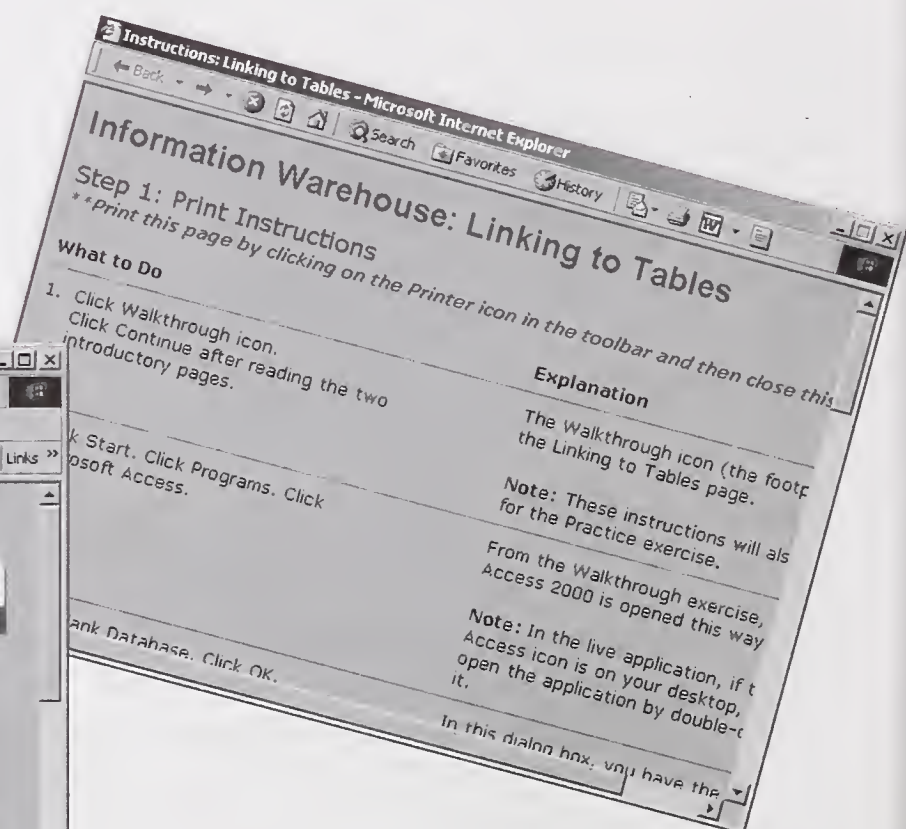
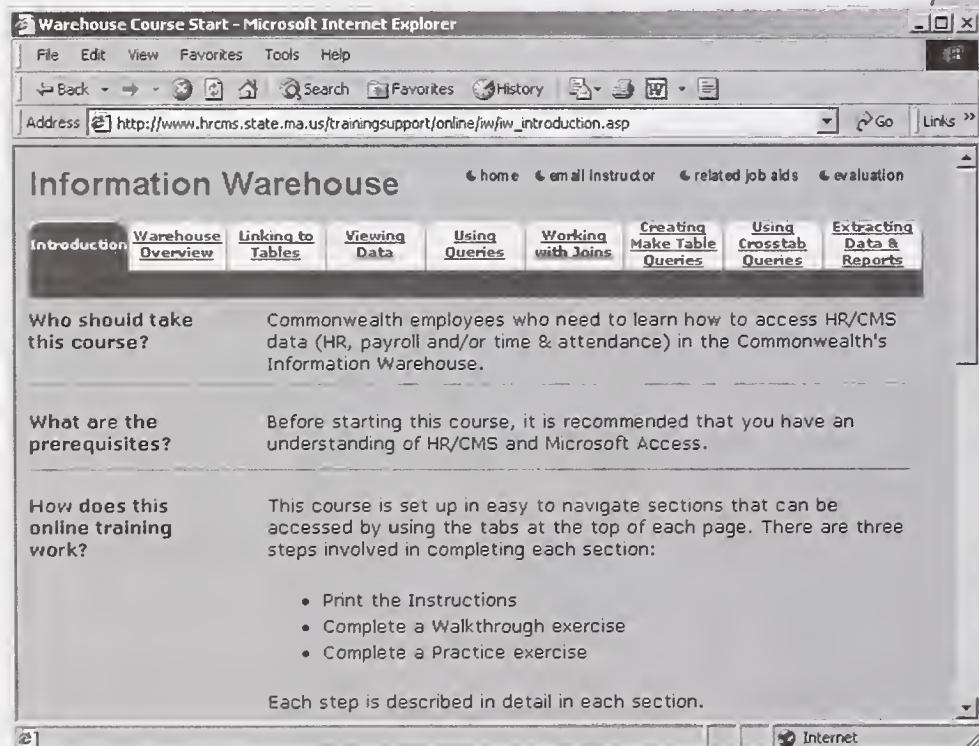
Developing an online course that adheres to instructional design standards yet is cost-effective and efficient to produce was the challenge that the HR/CMS Change Management Team faced when they began developing the eLearning Series. After many months of research and trial and error the Team achieved its goal.

The Introduction to the Information Warehouse online course was built with a powerful tool called RapidBuilder. RapidBuilder easily records desktop events. It records up to twelve frames per second without using costly video capture hardware. RapidBuilder is the only 100% programming-free simulation tool.

What this means for the learner is that they are learning and practicing the actual steps on how to complete a specific task. To the learner the simulation looks and feels like production. A necessity for knowledge transfer.

A learner can practice a process over and over without leaving his/her desk. The learner, who only does a process every few months or maybe once or twice a year, has the benefit of practicing that process before completing it in production. Again, the learner does not have to leave his/her desktop.

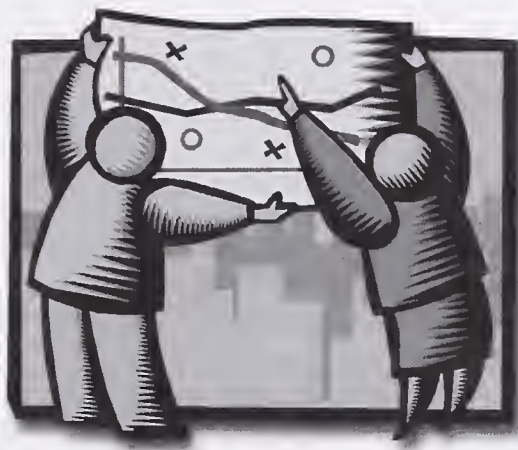
The most effective training approach is one that blends many delivery methods. With eLearning now an option the HR/CMS Change Management Team will not only offer HR/CMS training for the upgrade to 8.0 in a computer lab, it will offer it online through the HR/CMS Knowledge Center eLearning Series. A training approach that should appeal to every learning style!



Review the HR/CMS  
eLearning series at  
[www.hrcms.state.ma.us](http://www.hrcms.state.ma.us)



## IT INVESTMENT



During FY 2001, collaboration between the Information Technology Division (ITD) and agency CIOs and CFOs resulted in the successful implementation of the Investment Planning process. Utilizing the Investment Brief as a tool to collect and update project data, this process became the basis for approving projects, prioritizing IT Bond II funding for projects, measuring the success of these initiatives, managing the timely allotment of funds, and re-allotting funds to new projects throughout the fiscal year.

This year, the Strategic Planning Group (SPG) of ITD plans to build on this success and achieve even better results in support of the Commonwealth's E-Government Strategic Plan and Roadmap. As agencies begin planning new technology initiatives in FY 2002, it will be essential to consider the enterprise strategies defined in the E-Gov Strategic Plan. In reviewing and approving Investment Briefs submitted for FY 2002, SPG emphasized projects that support the goal of the E-Gov Strategic Plan—the development of a transaction-rich, customer-centric, enterprise portal that integrates services by customer needs rather than by government structure.

For FY 2002, the Investment Brief form was modified to support the EGov Strategic Plan. The additional information collected enabled SPG staff to identify the level of executive sponsorship, review the "business case" for the proposed project, and identify the metrics to be used to measure its success. All of this information was carefully considered in approving projects and prioritizing funding.

Executive Branch agencies were required to submit Investment Briefs for all technology spending, including operating costs. While Constitutional Offices and the Judiciary were required to submit Investment Briefs only for those projects supported by ITD controlled funds, they were encouraged to submit Investment Briefs in support of all their technology initiatives.

In addition to continuing to refine the Investment Brief process, ITD also worked collaboratively with the Fiscal Affairs Division to file legislation for IT Bond III. It is anticipated that passage of this bill will provide continued financial support for E-Government and other major technology initiatives.

## MASSMAIL IS UP AND FULLY FUNCTIONAL!

The seven Charter Agencies have joined the Forest and are in the process of migrating their users to the Exchange 2000 mail system. Microsoft Consulting Services has handed off the operational oversight of the system to ITD personnel in Chelsea, and to date over 2,000 users have migrated onto MassMail – leaving over 4,500 more users to migrate in this phase.

These new users are enjoying the enhanced performance and features of the MassMail environment. For many agencies, mail delivery speed has increased dramatically, and the ability to share real-time calendars, mail folders, tasks, and invitation lists has already proven to be a beneficial business tool.

Another exciting feature of the MassMail system will be the integrated ability to access emails from outside the Commonwealth Wide Area Network. This feature will allow a user to read his/her email from any machine through a connection to the Internet and either Internet Explorer or Netscape. The Enterprise Security Group, headed by Dan Walsh, and the rest of the Communication Support Services team are evaluating Outlook Web Access (OWA) and Virtual Private Network (VPN) to deploy the safest, most supportable solutions possible.

The plan for next FY's migration is for approximately 15,000 new users, most of whom are currently using Banyan products. The budget for this next phase has been prepared and Bond III is filed. ITD will again be providing the oversight and much of the budget for the migrating agencies. The process will be much easier following the hard work and trailblazing of the Charter Agencies which has resulted in a complete suite of forms, templates, lessons-learned, and integrator performance evaluations that will greatly simplify the migration for the next round of agencies.

The implementation of Windows 2000 and Active Directory is another step toward Enterprise-wide solutions that will help support the eGovernment initiatives.

Updates on the MassMail project are provided at the monthly IT User Group meetings and on the MassMail web site at <http://massmail.itd.state.ma.us>. If you would like additional information about Massmail, please contact Chris Edris at (617) 626-4530, [Christopher.edris@state.ma.us](mailto:Christopher.edris@state.ma.us).



# ITD RESOURCES

---

## ASK THE WEBMASTER:

**Sarah.Bourne@state.ma.us**

**Q: Does complying with the Web Accessibility Standards mean we cannot use Java or JavaScript on state web pages?**

A: The answer depends on what the script (or small program) is doing. For instance, using scripts for "mouse-over" features actually improves accessibility for users with mobility/dexterity limitations or low vision. When you move the mouse cursor over a link or icon, the image or text changes, making it clearer what you have picked before you click on it.

Some scripts, however, may be required to navigate the site. If alternatives are not provided, pages they are used on will not be accessible. This would include scripts that generate menus or navigation bars and scripts that activate choices from scroll boxes or drop-lists. (Lists that use scripts on the web server are not a problem.)

Other scripts may be used to control layout elements in conjunction with style sheets. Depending on how they are implemented, these may or may not be a problem.

Not all browsers have the same support for scripting languages. In some cases, a script written for one browser may cause other browsers to "crash" (i.e., shut down unexpectedly.) This seriously affects users' ability to access such pages.

The best way to see if a script has accessibility issues is to test your web pages with a variety (by brand and version) of browsers. You should be sure to include a browser that does not support scripting as well as testing with browsers with scripting turned off. Can you get to everything you could get to with scripting? If the page display is affected, is it at least acceptable in terms of aesthetics as well as layout? If the answers are "yes", then your use of scripting complies with the standards!

**Q: What is the most common accessibility problem?**

A: In quality assurance testing, the most common accessibility issue that the staff of ITD's Internet Services Group sees is inadequate use of alternate text for images and image maps.

The HTML tags for embedding images and creating image maps include attributes for text. Text browsers display this text where the image would be in a multimedia browser. This same text is also used if a

user has disabled images in their browser, common among people with slow dial-up connections. Also, more recent browsers display this text in a "bubble" when you put your mouse over the image. In the first two cases, the alternate text is essential for understanding and using the web page, especially when images have been used as link buttons and in image maps.

The text supplied must perform the same function as the image does. For instance, if the image is a decorative illustration, the text should describe the picture: "Picture of a group of people" or "Picture of covered bridge in Autumn". Any words in the picture should be included in the alternate text, especially for link buttons or page headings: "Link to Publications" or "Commonwealth of Massachusetts Department of xxx"

Some HTML editors automatically supply alternate text, but it still may not be accessible. FrontPage® for example, puts the file name and size as the alternate text, which is rarely adequate as a functional substitute. "Mass.gif (3541 bytes)" does not provide the same information as "picture of the Seal of the Commonwealth of Massachusetts" or "Link to the home page of the Commonwealth of Massachusetts."

Again, the best way to test for accessibility issues is to use a variety (by brand and version) of browsers, including text browsers as well as browsers with auto-loading of images turned off. (Also effective is having someone read your page to you, using the alternate text wherever an image is used.) Can you make sense of the page? Can you tell the difference between decorative elements and images that are links? Can you get to everything you could while using images? If the answers are "yes", then you are using alternate text properly!

(P.S.: Alternate text is included by the major Internet search services. Proper use of alternate text can improve your placement in search results!)

**Want to Know More?** See <http://www.state.ma.us/itd/spg/publications/standards/web-access-std.htm> for Web Accessibility Standards; and <http://www.state.ma.us/webmass/devlinks.htm#ada> for Web Development Links: Website Accessibility (tips and techniques).



# ITD RESOURCES

## E-PAYMENTS SHARED SERVICE UPDATE

The ePayments Shared Service, which will allow departments to incorporate various forms of ePayments (credit cards, debit cards, e-checks, etc.) into their applications, is currently under construction. The ePayments Shared Service is part of the foundation for the Commonwealth's new Enterprise Portal. ITD is partnering with the Human Resource Division (HRD) for the first implementation that will go into production in October. This will allow HRD's Civil Service Testing Application to process credit card payments through the web by "plugging" into the ePayments Shared Service. Some of the benefits of having a shared ePayments service include:

- **Time and Cost Savings:** The ePayments shared service will reduce departments' development timelines and resource requirements necessary for implementing and maintaining an end-to-end ePayments solution.
- **Centralized Connection Management:** By eliminating the number of proprietary connections between departments and vendors, the ePayments Shared Service will "buffer" participating departments from changes to processing vendor specifications.
- **Enhanced Reconciliation and Reporting:** Consolidating payment information from multiple payment sources and providing a standard interface to MMARS will enhance departments' ability to streamline their reconciliation, payment tracking and reporting processes.

During the past few months the ePayments team has settled on the system architecture, evaluated and selected a payment engine, negotiated with the current contracted payment processor and is currently documenting the system requirements. These requirements will encompass:

- **Payment Transactions:** An ePayments API (application programming interface) will be available to deliver the following types of ePayment functions:
  - **Authorization:** used to reserve payment amount on a customer's credit card account;
  - **Capture:** used to flag a transaction for settlement;
  - **Reversal:** used to cancel the authorization on a customer's credit card;
  - **Void:** used to cancel the payment transaction before the daily batch settlement occurs.

The API will be developed and maintained by ITD and shield departments from payment processors requirement changes. The API will be available for various platforms. A client application will also be made available to those departments that do not wish to integrate these functions into their application.

- **Centralized settlement:** Settlement is the process by which funds are debited from the consumer's credit card account and credited to the department's bank account. Departments will not have to develop or deploy their own settlement function.
- **Central payment tracking and reporting:** All ePayment transactions will be stored in a central database and made available to departments to facilitate payment tracking, reconciliation and reporting.
- **Revenue accounting:** MMARS will automate the entry of accounting transactions.

Construction activities will continue through the Spring with testing occurring during the summer months.

## GILS PROJECT

ITD is managing the requirements analysis of a GILS (Government Information Locator Service) implementation for the Commonwealth. Based on a standard developed by the federal government, many states are adopting GILS servers to enhance the ability to identify and locate information created and published by state agencies. GILS services are most commonly used for enhancing searches for materials published on the web and finding published and archival materials in paper collections. As a central directory service, it can also be used for related purposes, such as managing public records law rulings or agency publishing schedules. (More information on GILS can be found at <http://www.gils.net/>.)

ITD has been working with representatives from the State Library, the State Archives, the Supervisor of Public Records, and others to develop the business and functional requirements. The analysis focuses on existing systems to see how they would be integrated, options for efficiently incorporating web publications, and identifying potential future uses. By mid-May, ITD will have a detailed project plan and costs for a Commonwealth GILS implementation.

## INFORMATION TECHNOLOGY DIVISION

One Ashburton Place, Room 801  
Boston, MA 02108

The Information Technology Bulletin is a quarterly newsletter of ITD's Strategic Planning Group. One of the SPG's tasks is to act as a clearinghouse for IT information. This publication furthers that goal. Please send correspondence to Managing Editor, Elaine Socha, the Information Technology Bulletin, Room 801, One Ashburton Place, Boston, MA 02108

Voice: (617) 626-4425  
FAX: (617) 727-3766  
Email: Elaine.Socha@state.ma.us

This publication is available on the public Internet at <http://www.state.ma.us/itd/publications.htm>, and on the state's intranet at <http://www.itd.state.ma.us/publications.htm>.

Photos by Jerry Shereda  
[fine-photos@mediaone.net](mailto:fine-photos@mediaone.net)

Next Publication: Summer 2001



\*\*\*\*\*SNGLP

**SNGLP**

**Leonard Adams**

**UMass - W.E.B. DuBois Library**

**GOVERNMENT DOCUMENTS**

**AMHERST MA 01003**

Presorted  
First Class  
U.S. Postage Paid  
Permit No. 2226  
Worcester, MA



Printed on Recycled Paper

If any part of the address on this newsletter is incorrect, mark the changes on a photocopy and send or fax the copy using the information in the upper left.

## A MESSAGE FROM THE CIO

Mass.Gov is moving from planning to implementation!

A lot of activity is taking place to bring our vision of a new intentions-based enterprise portal into reality. We are in the process of organizing the new Mass.Gov office, posting new positions, selecting a portal development partner, and organizing the Mass.Gov Advisory Board composed of high-level policy makers from all branches of state government.

You can follow the progress of this major initiative by visiting the [www.Mass.Gov](http://www.Mass.Gov) web site. Regular updates are also included in this Bulletin as well as the monthly IT User Group meetings hosted by ITD. However, I encourage you to do more than just sit on the sidelines.

There are many opportunities for direct participation in the many projects that together will comprise Mass.Gov. Your participation in groups such as the Portal Advisory Committee, the teams that will be creating the access channels and virtual agencies of the portal, and the project teams that are developing the shared services and e-applications is crucial to the success of Mass.Gov. We actively encourage your input and collaboration and expect that you will share what you learn with the rest of your agencies.

David Lewis

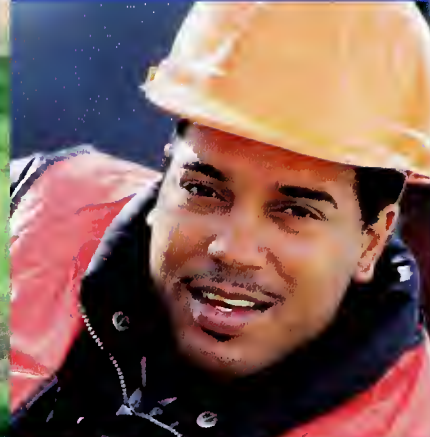




Isn't there  
something  
you'd rather  
be doing?



Don't wait in  
line...



## Commonwealth Of Massachusetts Information Technology Annual Report

Fiscal Year 2001

*A Special Edition Of  
The Information Technology Bulletin  
Volume 7, Number 3, Summer 2001*

# Commonwealth Of Massachusetts Information Technology Bulletin

Volume 7, Number 3, Summer 2001

## A Special Edition

### In This Issue

<b>Message From Governor Swift .....</b>	<b>3</b>
<b>EGov Overview</b>	
Mass.Gov Moves Ahead .....	4
Status Of High Priority EGov Applications .....	5
A CLEAR View Of EGovernment Legal Issues .....	6
<b>Government To Business</b>	
New Licensing System For Marine Fisheries .....	7
<b>Government To Business, Citizens &amp; Government</b>	
UMass Advances Networking, Distance Learning & Libraries .....	8
Massachusetts One-Stop Employment System .....	9
<b>Government To Business, Citizens, Employees &amp; Government</b>	
State Comptrollers Office Upgrades .....	10
Job Seekers & Executive Agencies Benefit From HRD Enhancements .....	11
<b>Government To Government</b>	
Public Safety Agencies Pursue EGov Goals .....	12
Enterprise Applications Resources .....	14
<b>Improvement Of Government Efficiency &amp; Effectiveness</b>	
Enterprise Communication Services .....	15
Operational Service Bureau Prepares For New Technology .....	16
DPH Process Helps Ensure IT Project Success .....	17
<b>IT Spending</b>	
IT Bond II FY2001 Preliminary Expenditures .....	18
Preliminary FY2001 IT Spending .....	19
Farewell To IT Bond II - Hail IT Bond III .....	20
<b>Message From The CIO .....</b>	<b>23</b>



## SHAPING THE FUTURE FOR MASSACHUSETTS



We're changing the way we do business in Massachusetts. Over the past decade, state government has become increasingly more creative, responsive, and efficient. We've streamlined services through reorganization and consolidation, and we've taken advantage of the tremendous opportunities provided by technology. Thanks to the commitment and energy of our managers and front-line workers, Massachusetts government is fast becoming a model of 21<sup>st</sup> century service delivery.

To keep us on this exciting road, I've placed a high priority on building Mass.Gov. As you know, this cutting-edge enterprise portal will quickly deliver information to millions of Bay State citizens. Think about it: with a simple point and click, parents will locate child care options; entrepreneurs will learn how to open a business; and town managers will apply for state grants.

Last year's Annual Report issue forecasted the state's move to EGov, and in a short period of time, we've made tremendous progress. The Electronic Government Task Force has already produced a Strategic Plan and Roadmap. They outlined an overall strategy; they identified high priority applications for early development; and they defined the governance structure for building the portal. The IT Bulletin will continue to report on Mass.Gov's progress and accomplishments.

With all the promise of technology, we still understand that state government is run first and foremost by talented people committed to public service. To continue generating fresh ideas about how we can do what we do better, I've started the Managing for Results Initiative (MRI). This is an opportunity to examine our agencies from a customer's perspective, to craft recommendations, and begin making improvements. I have no doubt that we will find programs and policies with overlapping missions, or procedures so complex that citizens are left feeling confused and frustrated.

Two key elements to our success will be strong employee involvement and management leadership and support. Unlike other such initiatives, this one is:

- **Internally Generated.** The MRI is guided by a task force of representatives across state agencies;
- **Deliberative.** The initiative will take four to six months to complete;
- **Inclusive.** It involves all front-line workers and managers. This initiative is going to work from the bottom up, not the top down; and
- **Focused on Results.** The MRI will produce concrete, doable recommendations that can be implemented within 18 to 24 months.

I'm going to closely track the progress of the MRI, keeping an eye out for creative agencies and rewarding them for successful implementation. I've also set aside \$10 million for this purpose. Fresh ideas and commitment will be recognized and supported.

With EGov on the horizon and the MRI in full swing, this is one of the most exciting times to be in public service. We have a unique opportunity to thoughtfully and creatively shape the future for all Massachusetts citizens. Don't miss it!

A handwritten signature in blue ink, which appears to read "Jane Swift".

Jane Swift, Governor



# MASS.GOV MOVES AHEAD

### Mass.Gov Office Established

ITD has established a new group, the **Mass.Gov** Office, for the development and implementation of the electronic government initiatives. Bob Nevins has been named **Mass.Gov** Director, reporting to David Lewis, Commonwealth CIO and ITD Director. "I am pleased to have someone of the caliber of Bob Nevins take the leadership role for this most important customer-centric initiative," said Lewis. "Bob's experience and talent will serve Massachusetts well as we transform the delivery of government services by using the latest Internet technologies to bring together distinct government organizations."

Nevins has been Deputy Commissioner for Research and Development at the Department of Revenue (DOR) for the past five years where he has been instrumental in implementing many EGov initiatives that resulted in efficiency gains and improved service. Most notable is e-filing of income tax returns that began during the budget crunch in the early 90's when DOR was forced to reduce staff by 25%. E-filing resulted in cutting in half the processing time of a return over five years, offering better service at less cost. Nevins has been promoted to increasingly responsible positions at DOR since 1987 and led the team that was awarded the Manuel Carballo Governor's Award for Excellence in Public Service in 1994, the Commonwealth's highest honor for Executive Department employees. Nevins has been nominated for this same award again this year.

"I am excited and energized about this new opportunity to bring state government closer to the people, making it easier for everyone to access services while ultimately making government more efficient," said Nevins. "I am eager to help shape the future of digital government in Massachusetts."

Following on her leadership in selecting the enterprise portal vendor, Portal Implementation Manager Sylvia Kauffman is continuing to lead on the development of the **Mass.Gov** Portal, Massachusetts' gateway to integrated government services organized around customer needs, not government structure. Kauffman leads the Portal Advisory Group in working with the vendor to define the requirements and guide the portal design.

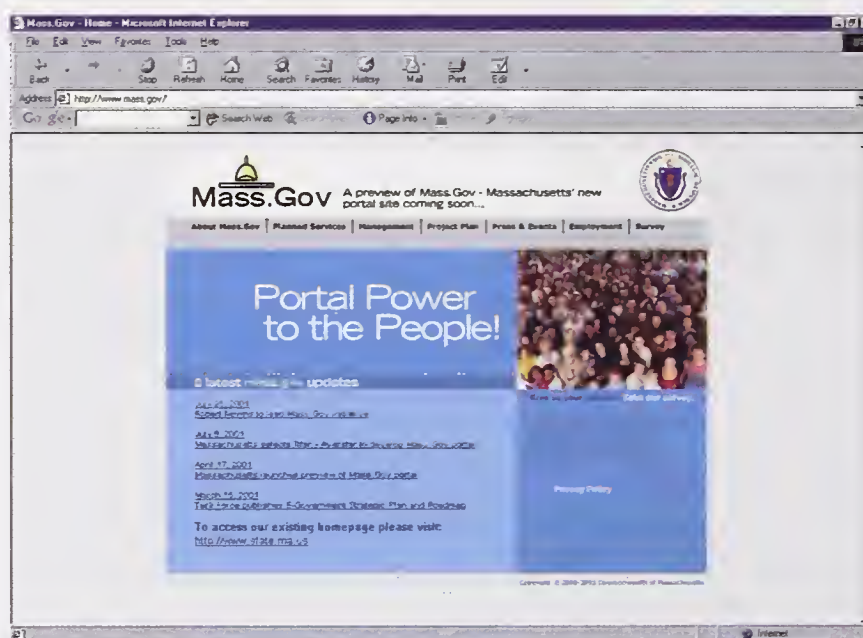
The **Mass.Gov** Office is currently selecting four Channel Managers for the Government to Business, Government to Citizens, Government to Municipalities, and Other (Visitors, Employees, etc.) access channels. The next recruitment

round will seek Business Analysts for each of the access channels.

### Mass.Gov Portal Development Proceeds

The Portal Advisory Group (PAG), which served as the procurement team for the selection of the enterprise portal vendor, continues to meet regularly to advise the vendor about Commonwealth requirements for the portal. The PAG has selected the **Mass.Gov** logo, site navigation, and high-level graphics. A work group has been established for each of the access channels [Government to Business, Government to Citizens, Government to Municipalities, and Other (Visitors, Employees, etc.)] to identify virtual agencies and intentions for that channel. An ITD technical operations team is also meeting with the portal vendor to define the technical architecture and hosting environment. A Statement of Work has been finalized with the Usability Testing vendor.

The **Mass.Gov** preview site at [www.mass.gov/](http://www.mass.gov/) has been available for several months. It will be replaced in late October by the new enterprise portal.







## EGov Overview

### Status of High Priority EGov Applications

During the preparation of the Strategic Plan and Roadmap (available at [www.mass.gov/](http://www.mass.gov/)), the EGov Task Force selected 16 EGov applications for early development. The table below lists the status of each of these applications as of August 20, 2001.

	Agencies Involved (Lead Agency In Bold)	Phase Of Project	Investment Brief & Detailed Plan	Funding Approved	\$ Allocated To Date	Projected Implement. Date
<b>Portal Foundation</b>						
1. Portol Foundation Development	<b>ITD</b>	Development	●	●	\$1.8M	10/01
<b>Shared Services</b>						
2. Security	<b>ITD</b>	Design	◐	◐	\$0.7M	11/01
3. ePoyments	<b>ITD, OSC</b>	Development	●	●	\$2M	10/01
4. eCustomer Relationship Monogement (eCRM)	<b>ITD</b>	Cost/Benefit Analysis	○	○		TBD
5. Geogrophic Information System (GIS)	<b>EOEA (MassGIS)</b>	Requirements Anolysis	●	●	\$2.3M	7/02 (Phase I)
<b>Programs Serving Citizens</b>						
6. MossCores	<b>EOHHS, DHCD</b>	System Testing (Phose 1)	●	●	\$4M	6/03 (Phase 1)
7. eChild Support Enforcement	<b>DOR</b>	Requirement Anolysis	●	●	\$0.25M	2/02 (Phase 1)
8. On-line Teacher Certification & Recruitment	<b>DOE</b>	Design	◐	●	\$2.4M	10/01 (Phase 1)
9. E-Gov Recreationol Licenses	<b>DFWELE</b>	Acceptance Testing	●	●	\$0.6M	11/01
<b>Programs Serving Business &amp; Non-Profit Org.</b>						
10. Drivers' Record License Lookup & Notificotion	<b>RMV</b>	Cost/Benefit Analysis	○	○	\$4M	6/03 (Phase 1)
11. Professionol License Renewol & Complotnt Submission	<b>OCA, EOEA, DFS</b>	Development (Phose I)	●	●	\$0.25M	2/02 (Phase 1)
12. Online Submission of Applications for Environmental Permits & Certification	<b>DEP</b>	Cost/Benefit Analysis	●	●	\$2.4M	10/01 (Phase 1)
13. Comm-PASS Enhoncement & eProcurement Portol	<b>OSD</b>	Requirement Anolysis	●	●	\$0.6M	11/01
14. CORI Automoted Screening System (CASS)	<b>CHSB, DOC, OCP, PB, SOR</b>	Development (Phase II)	◐	◐	\$0.6M	11/01
15. eFiling of Non-Profit Finonciol Reports	<b>OSD</b>	Requirement Anolysis	●	●	\$0.6M	11/01
<b>Programs Serving Municipalities</b>						
16a. Municipal eFiling - Executive Order 418 Rpts.	<b>DHCD, EOEA, EOT</b>	Design	●	●	\$0.7M	1/03
16b. Municipal eFiling - Educotion Gronts	<b>DOE</b>	Cost/Benefit	◐	○		TBD

Key: ○ Low/Minimol (-)    ◐ Medium (=)    ● High/Extensive (+)



# A CLEAR VIEW OF EGOVERNMENT LEGAL ISSUES

If you are a government attorney, you may have scratched your head about some of the following challenging legal puzzles lately:

- How can the Commonwealth maximize the use of the Internet while fully respecting citizen privacy?
- What electronic records need to be saved in order to comply with records disposition schedules?
- Which governmental transactions with citizens and businesses can be safely conducted over the Internet?
- How do agencies create electronic records of such transactions that can be used by them in later enforcement actions?
- What is an electronic signature?

There is currently no good roadmap for Massachusetts state government attorneys attempting to steer a course through the forest of electronic government. That's why ITD hosts the CyberLaw EGovernment Advisory Roundtable (CLEAR).

Convened for the first time in March of 2001, CLEAR, a group of high level counsel from all three branches of government, is a clearinghouse for information about "best legal practices" with respect to legal issues arising out of EGovernment. The group provides a forum for counsel to identify difficult EGovernment legal issues and develops legal guidance for all state agencies, the constitutional offices, and the three branches of government with respect to such issues.

In its brief tenure, the group has tackled the following thorny questions:

*Can my agency still require that the regulated public keep paper records of certain transactions?*

The Federal Electronic Signatures in Global and National Commerce Act, P.L. 106-229, enacted on June 30, 2000 ("E-SIGN"), validates electronic signatures, contracts, and other records pertaining to interstate or foreign commerce. Effective March 1, 2001, it imposes a revolutionary limitation on state agencies' former ability to require that private parties keep paper records of such transactions, forbidding

state agencies to limit parties to keeping *paper* records of certain transactions where the parties prefer to use *electronic* ones. This startling change is modified somewhat by additional provisions of E-SIGN permitting agencies to specify filing standards for filing formats and the accuracy, record integrity, and accessibility of electronic records, and to require private parties' retention of paper records for law enforcement and national security purposes. Unfortunately, E-SIGN's rules for state agencies are difficult to interpret. The CLEAR group reviewed and approved for distribution to all agencies draft guidance from the National Electronic Commerce Coordinating Council's E-SIGN Legal and Policy Work Group, entitled "Record Retention Analysis Under E-SIGN", which addresses the challenging legal issues created by this law.

*What is an electronic signature, contract or related record?*

At their second meeting, in May of 2001, CLEAR members heard a presentation from Daniel Greenwood, ITD Special Consultant for E-Commerce, on the topic of what the terms "signature" and "contract" mean under E-SIGN, the Uniform Electronic Transactions Act (not yet effective in Massachusetts), and Massachusetts law. Attendees learned that the Federal E-SIGN legislation, which preempts state law, validates only signatures and records pertaining to consumer and commercial transactions in interstate and foreign commerce, rather than purely governmental transactions; that there is no black-letter law in Massachusetts universally validating electronic signatures and contracts used in connection with any transactions, in particular purely governmental state government activities; but that Massachusetts courts have been progressive in extending the common law definition of these terms into the electronic age. The group reviewed and approved for dissemination to state agency counsel the U.S. Department of Justice's comprehensive Legal Considerations in Designing and Implementing Electronic Processes, a Guide for Federal Agencies, and a cover memorandum written by ITD's general counsel explaining the different legal landscapes faced by Federal and Massachusetts state government attorneys.

*Continued on Page 7*





## NEW LICENSING SYSTEM FOR MARINE FISHERIES



Gloucester Waterfront  
Image Courtesy of Corps Photo Collection  
NOAA Photo Library, NOAA Central Library

On April 12 the Director of the Division of Marine Fisheries (DMF), Paul Diodati, awarded the first annual Director's Achievement Award to the Division's Licensing and Information Technology Development Staff for FISH2000. FISH2000 is a complex, web enabled application that issues and tracks all of the Division's commercial fisherman, seafood dealer and special permits. Because the Division uses licensing controls to manage marine fisheries resources, the system has extremely complex business rules that must be strictly enforced. In the past, fishermen had to carry up to 10 different permits to participate in special and regulated fisheries. Now only one is required. Director Diodati stated that, "Although the roll out was a bit late, the system is proving to be a great tool for the Division and its licensing staff and is a big hit with our constituents." Department of Fisheries, Wildlife and Environmental Law Enforcement Commissioner David Peters was on hand to assist with the presentation of the awards. The development of FISH2000 was funded through IT Bond II.

DMF IT staff teamed with Oracle Consulting to develop the application. It's an Oracle 8i Application, developed using Oracle WEB DB (now Oracle Portal) and the full power of the Oracle Developer and Designer tools. Oracle's OLAP (online analytical processing) tool, Discoverer, will be used to create user-friendly queries against the database.

---

### A CLEAR View Of EGovernment Issues, Continued from page 6

*What kind of language should be included in a contract with a Web site or software developer?*

At CLEAR's July 2001 meeting, Harold Fisher, Deputy General Counsel of OSD, presented and CLEAR discussed a draft set of standards for agency counsel to use when negotiating Web site and software development agreements. This draft was developed by a working group that includes representatives from the private sector, agency counsel, the Attorney General's Office, and the Commonwealth's Operational Services Division.

*How can agencies ensure citizen privacy?*

ITD has played a leading role in working with the Governor's Office and the Executive Office for Administration and Finance ("ANF") to develop standards for all state Web sites with respect to mandatory privacy policies. CLEAR will take this project a step further by developing an enterprise-wide privacy policy that will eventually be proposed

to the Administration. A CLEAR working group led by Jenny Hedderman, Deputy General Counsel of the Office of the State Comptroller, and including representatives from ITD, the AG's office and the Courts, will present the draft policy at CLEAR's September meeting.

The list of perplexing legal issues raised by EGovernment is long, and CLEAR's future projects include, among other things, developing information and guidelines for agencies pertaining to cyber crime, agency liability arising out of Web site-related activities, records disclosure and management in the electronic age.

For more information about CLEAR, copies of information already reviewed by CLEAR and distributed to agency counsel, and guidance on EGovernment legal issues, agency counsel should call ITD General Counsel Linda Hamel at (617)-626-4404 or email her at [Linda.hamel@itd.state.ma.us](mailto:Linda.hamel@itd.state.ma.us).



## UMASS ADVANCES NETWORKING, DISTANCE LEARNING & LIBRARIES



### **Massachusetts Information Turnpike Initiative (MITI)**

During FY01, the MITI network continued to expand its existing services and to add new services to support the telecommunication needs of higher education, public libraries, and state agencies. Due to the increasing demand for

Internet services, MITI upgraded its DS3 (45Mbps) Internet links to OC3 (155Mbps) to enable meeting the immediate needs of customers and to be in a position to respond rapidly to any future Internet bandwidth requests. Several network hardware and software upgrades were completed to support delivery of these services.

A video bridge and several new video gateways were added to the network to expand the reach and quality of our video services to all parts of the Commonwealth.

Transport services were provided to the Trial Court System, the Department of Employment and Training, and CWMARS (the library consortia that services Central and Western Massachusetts). This service allows public entities that have locations across the Commonwealth to communicate electronically over the high speed MITI network.

In the latter part of the fiscal year, MITI began providing application hosting services. This service will be expanded throughout FY02 to support the UMassOnline initiative (described below), State and Community colleges, and State agencies that wish to host applications on the MITI network for high-speed access from the Internet and across the backbone network.

### **UMass Distance Learning Initiative**

FY01 also saw the University launch a web-based distance learning initiative called UMassOnline to meet the public demand for online degree programs and courses. The distance learning bond funding was used

primarily to support UMassOnline start-up activities. A major emphasis was placed on creating facilities to prepare faculty to develop web-based courses for UMassOnline. These facilities, which double as computer laboratories when not in use for classes, have the necessary multimedia software and hardware to create high quality graphics and video for online and interactive video distance learning classes.

Hardware and software were purchased to house the UMassOnline portal. It provides an eye-catching description of the distance learning offerings of the UMass five-campus system. Nearly 25,000 hits were made on the site in just two months. Visit the UMassOnline web site at [www.umassonline.net/](http://www.umassonline.net/).

The funding has also provided improvements to distance learning classrooms, as well as the connection of additional distance learning classrooms and associated network upgrades.

### **UMass Digital Library**

The libraries of the University of Massachusetts embarked on a project to offer services and information to students and broader user communities through the creation of a shared digital library. Projects included in this first phase of the UMass Digital Library completed in FY01 were:

- A **Web Site/Portal** was developed to serve as a gateway for the digitized collections and services of the UMass libraries.
- A list of electronic resources to be shared by all campuses was developed by a group of librarians from all five campuses, and negotiations were completed for these resources. Titles purchased included: the *Oxford English Dictionary*, *Mental Measurements Yearbook*, *ABI Inform* (a business database), and 100 NetLibrary e-book titles.
- **Extended Reference:** A software package called "LivePerson" and laptop computers were purchased for all campuses to provide live chat interaction between remote users and an on-duty reference librarian.

*Continued on page 21*





## Massachusetts One-Stop Employment System

### **New Employment and Training System Improves Services to Employers, Trainees and Job Seekers**

The Massachusetts Division of Employment and Training (DET) is responsible for Employment and Training Services across the Commonwealth.

DET works with Massachusetts businesses and their employees in a number of areas to provide information, funding, and employment and training services

throughout the Commonwealth. For example, the Workforce Training Fund administered by DET provides grants to train workers in up-to-the minute skills and technology. DET also provides essential financial assistance for workers who are temporarily

#### **Major features of MOSES**

- Integrates over 20 programs
- Over 200 locations across state
- Gives weight to employer services
- Expands local office services beyond those traditional provided
- Offers opportunities for ad-hoc reporting
- Adaptable
- Windows based
- Dynamic user security
- Connectivity

between jobs. In addition, DET partners with Regional Employment Boards, local elected officials, and other agencies to ensure that workers and employers are linked through the state's network of One-Stop Career Centers. As part of its data collection efforts, the agency provides economists, educators and government officials with economic data indispensable for making strategic decisions for the Bay State's future.

All of these employment and training services are provided to customers through an integrated network of 39 Career Centers located across the Commonwealth. Recently, DET implemented the Massachusetts One Stop Employment System (MOSES), a windows based intranet data system that links all of the Career Centers by providing data collection, data exchange, and management reporting.

MOSES was developed in conjunction with Deloitte Consulting and replaces three separate mainframe systems that did not permit the sharing of data. MOSES is

Client/Server application developed in Power Builder. It utilizes an intranet network connecting over 1,000 staff at 200 locations across the Commonwealth and provides:

- Case Management
- Statewide job matching
- Eligibility determination for training
- Report functionality

"MOSES was designed to collect data more efficiently, which allows our counselors to do a better job matching clients to programs or job openings," said DET Program Manager John Walsh. Mr. Walsh said that MOSES collects data about people such as vocation, employment history, education and demographics to determine client eligibility for up to twenty-five different programs.

MOSES also collects data from client companies, allowing DET staff to create employer records and fill job openings. "Employers can provide job opening information to us and MOSES will match employers and employees based on the information we receive," said Mr. Walsh. The system also includes information on training courses approved by DET. For example, if a draftsman is in need of CAD training, MOSES will help identify DET funded programs at any number of local education institutions such as MIT or Wentworth. Since first becoming operation in July, 2000, MOSES has helped place almost 22,000 clients in new jobs.

While MOSES is currently an intranet based system for DET staff use only, plans are in the works for an internet based self-service system known as Mass. Job Quest (MJQ). This expansion of MOSES will allow people to view available jobs, create a personal profile and match their skills to those jobs. The system will also have a message center, enabling interested employers to send e-mails to job applicants.

Mr. Walsh pointed out that user acceptance is extremely high, which he attributes to the fact that over 1,000 staff participated in the development of MOSES through twenty different committees. Particular credit for the successful development and implementation of the system is given to DET Director Jack King, Project Directors Marilyn Boyle and Patricia O'Donnell, IT Director Jeff Ritter, and Training Director Joan Folcik.



## STATE COMPTROLLERS OFFICE UPGRADES

The Office of the State Comptroller (OSC) has been an early advocate for e-government applications, with a number of award winning projects. As technology evolves, OSC continues to introduce new applications while upgrading existing ones. Listed below are just a few.

### **Massachusetts Management, Accounting, and Reporting System (MMARS)**

MMARS has been successfully supporting the Commonwealth's accounting system for the past fifteen years, winning multiple awards along the way. Over the last decade, the OSC in partnership with ITD, has continued to add functionality to MMARS. However the underlying customer interface has continued to be the so called "green screen", mainframe character based user interface that recalls the 80's technology and programming on which the system is built. "The Commonwealth is moving to more modern technology for the payroll system with HR/CMS and also the launching of an EGov initiative to construct a new suite of government applications. These changes led OSC to evaluate the tradeoffs between continuing to enhance the functionality in the MMARS legacy system versus upgrading to new technology," said State Comptroller Martin Benison. The initial conclusion was that upgrading the underlying technologies of the Commonwealth's financial systems will:

- Enhance the ability to provide real-time interfaces between the portal and the Commonwealth's accounting system;
- Allow government workers to more easily move between these systems;
- Significantly reduce the cost of integration.

In June 2000, the Comptroller established a Steering Committee to provide guidance and advice in the evaluation of financial accounting systems currently available in the marketplace. The committee requested that an evaluation be performed on the leaders in the field of financial accounting systems to determine the functional fit with the Commonwealth. The intent was to identify financial accounting systems that may serve as adequate replacements for MMARS. All of the systems evaluated were Internet based, multi-platform applications that claim to be capable of supporting a diverse government structure like the Commonwealth. When all factors were considered, the evaluation team recommended an upgrade of the existing AMS system. According to Bill Hardin, System Integration Manager, the team concurred that the upgraded system will more actively support e-government applications, and over time, will reduce the cost of integration by utilizing the common standards of the web. In addition, it will provide an increased ease of use for government and non-government users through the utilization of common browsers.

The Comptroller believes that it is good government practice to take advantage of new and evolving technologies to improve legacy systems and the web is a viable mechanism that should be utilized to make it happen.

### **PayInfo**

PayInfo is the successor of a Paperless Payroll initiative developed by the Office of the Comptroller. During the Paperless Payroll pilot, employees from six departments utilized a web site to access individual payroll information. Feedback from the pilot was reviewed and as a result, the web site was re-engineered. Additionally, the feedback illustrated a need to enable departments to print duplicate payroll advices locally. The project supports federal and state initiatives to eliminate paperwork whenever possible. OSC's Barbara Miller, Web Development Manager, said that user feedback was a key to the system enhancements. PayInfo developed two new applications that provide new functionality for payroll administrators and employees.

- **Decentralized Distribution:** This application allows payroll directors to view employees' remittance advices using the Commonwealth's existing mainframe based online reporting system, View Direct, and print them locally. The Decentralized Distribution functionality was delivered last year. Departmental payroll personnel are successfully accessing and utilizing the reporting capability.
- **Web based application:** This application allows Commonwealth employees to view and print payroll remittance advice information via a secure Internet connection at their convenience from wherever they are. The Web based application is currently in pilot, with several agencies on a list waiting to pilot. Working with the Human Resource Division, OSC is planning to roll out to more departments, with the goal of statewide implementation during FY2002.

OSC is committed to implementing these new benefits to the Commonwealth's employees.

### **MASSfinance**

MASSfinance is a two time Award winning web site/application that delivers financial information to Commonwealth employees, vendors, customers, other governments, and the general public. The information is updated daily and available on demand, 24 hours a day, 365 days a year. The site currently averages over 7,000 users per week.

Currently, MASSfinance consists of *CommonCents*, *VendorWeb* and *Cities and Towns*. Over the past year, MASSfinance has been enhanced in a number of areas.

*Continued on page 21*





## **JOB SEEKERS AND EXECUTIVE AGENCIES BENEFIT FROM HRD ENHANCEMENTS**

### **CEO**

The Human Resources Division (HRD) has been posting Executive Branch agency job openings on its Commonwealth Employment Opportunities (CEO) web site since 1997. CEO has been a popular and successful web application – making it easier for job seekers to find employment opportunities with the Commonwealth and for executive agencies to attract qualified candidates.

As part of a larger effort to reengineer the state's hiring process, CEO has

recently been upgraded and enhanced. According to HRD IT Director John Shontell, the changes to CEO, many of which were recommended by an interagency focus group, will provide new tools to both the posting agencies and the on-line job seekers.

"We have a very large audience using CEO but we found it did not meet all of their needs," said Mr. Shontell. Many of those needs have been addressed in the new version of CEO. For example, directly from the CEO home page, job seekers will now find more information such as a downloadable CEO booklet. They will also find general information about:

- CEO Postings
- Civil Service
- Definition of a Qualified Veteran
- Links to other services provided by the Human Resources Division

CEO has also been enhanced to make it easier for job seekers to find job openings that meet their needs and qualifications. For example, they can identify positions through a key word search or through a number of other options, including:

- Agency
- Location - Region and/or city/town
- Part-time vs. Full-time
- Occupational Group
- Management vs. Non-Management
- Position Types - Contract or Seasonal

The posting agencies will also benefit from enhancements to the system. For example, agency and secretariat reviewers will be notified via e-mail of new postings requiring their review and approval. Agency job posters will also have the ability to track

and identify the status of job postings on-line. One significant new addition which will be implemented soon after the application is released is the ability of agencies (upon approval of the agency head) to accept resumes and cover letters electronically. In addition, because the information will be populated into job postings from the Data Warehouse based upon position number, less data entry will be required. "Once the posting number is listed, the information is there and there is no need for duplicate entries," said Mr. Shontell. "This is another big time saver for agency staff."

The new CEO application is just the first of a series of changes that will occur over the course of the next several weeks on the HRD Web site which will make it easier to find state employment opportunities and learn about the many benefits of working for the Commonwealth.

### **Civil Service Exams**

In addition to enhancing the CEO website, HRD has also focused on providing Civil Service information and services over the Internet. Each year, HRD administers approximately twenty open competitive and promotional Civil Service Exams to over 20,000 applicants. Currently, all aspects of the system are paper-based and applicants must pay for exams in person with a credit card or by mail, using a money order.

One enhancement underway will allow civil service test applicants to apply on-line and pay for that application by credit card. "Every year during the application process there are lines stretching through the lobby of the McCormack Building. With a 24 x 7 internet payment system we will help eliminate those lines and the inconvenience to the applicants," said Mr. Shontell.

This phase of the civil service enhancement effort will be up and running in the fall. A second phase is being planned for the spring and will provide information on test sites as well as directions to those sites. Plans also include the ability for applicants to obtain their individual test scores and standings on lists via the Internet. Currently that information is only available in person or by written request.



# PUBLIC SAFETY AGENCIES PURSUE EGOV GOALS



The Public Safety agencies are forging ahead with many cross-agency and Internet-based projects to improve their efficiency and effectiveness. Here are some highlights:

### State Police Use Web Site & Data Matches To Apprehend Violent Fugitives

Through a cooperative effort with federal agencies, state agencies, municipalities and the public, the Violent Fugitive Task Force – comprised of State Police and Corrections Officers – develops leads on the location of wanted violent felons to effect their apprehension. One of the methods used

is the "Top Ten Most Wanted" list. This poster, coordinated with the District Attorneys, State Probation/Parole Departments, and local police departments throughout the state, is distributed both locally and nationally and is posted on the State Police web site (<http://www.state.ma.us/msp/wanted/wanted.htm>). Expanded to a roster of 14 wanted individuals, the web page's exposure has resulted in the apprehension of four of the felons on the recently published most wanted list.

The Welfare Reform Act of 1996 provided the first "cross-match" of wanted felons in Massachusetts against the Department of Transitional Assistance (welfare). The "cross-match" has led to the arrest of violent felons, individuals turning themselves in, and others being shut-off from benefits until their warrants are cleared. The Division of Employment and Training was another state agency to perform the cross match against Massachusetts felony warrants. This cross match yielded 2,320 felony hits of which 194 are considered major cases. Cross matching has also been done with the federal agencies, Social Security (SSI), and the USDA for food stamps.

The Task Force has also initiated through the Office of the Secretary of Public Safety, "Operation Clean Sweep". This program involves matching Massachusetts felony warrants against those of other states and has resulted in the apprehension of 76 individuals identified as violent felons.

The Criminal History Systems Board and the Informa-

tion Technology Division have begun an initiative to automate the cross match process through CommBridge. This will allow the agencies that utilize or provide match data to have more immediate access to and greater flexibility with the information.

### Parole's Automated Tracking System (PATS) On-Line

The Massachusetts Parole Board's client tracking and case management system, PATS, is now on-line in 38 locations across the Commonwealth. PATS is designed to track offenders throughout the state and county correctional facilities, record parole community supervision information, follow the offender until his/her completion of sentence, and link victims to their offenders in order to provide the victims with timely notices and contacts.

PATS is an on-line, real-time system that electronically transmits offender information among Parole's twenty-seven state and county correctional offices, nine community supervision field offices, and the administrative office; thereby increasing the timeliness and efficiency of information transfer and reducing the redundant entry of offender information.

Implementation of PATS in all Parole Board locations advances the Commonwealth's goal of increasing public safety through data sharing in order to establish a complete, accurate and integrated criminal justice record keeping system. Parolee information is electronically transmitted from PATS to the Criminal History Systems Board (CHSB) to comply with the Criminal Offender Record Information (CORI) Law, the Sex Offender Registry Law, and to provide current parole status to the Massachusetts criminal justice community via the CHSB's on-line Board Of Probation (BOP) interface.

Connectivity to PATS was achieved via partnerships with the Executive Office of Public Safety, the Criminal History Systems Board, the Information Technology Division (ITD), the Department of Correction (DOC), and the Sheriffs who are in charge of the Houses of Correction. The willingness of the partner agencies to share technical assistance and resources has enabled the Parole Board to access the CHSB network for law enforcement information, DOC for information on state inmates, ITD for access to Parole's Automated Tracking System, and the Internet.





# PUBLIC SAFETY AGENCIES PURSUE EGOV GOALS - CONTINUED

### Automated CORI Checks, Soon To Be Online

The Criminal Offender Record Information (CORI) Unit of the Criminal History Systems Board (CHSB) is responsible for conducting CORI checks for approved agencies such as schools, nursing homes and daycare centers. The CORI Unit has experienced a tremendous growth in the number of CORI checks requested, almost doubling in volume from 1996 to 2000. The CHSB recognized that, to meet this demand, the process of conducting CORI checks would have to be automated. The CHSB devised a plan to automate the process, was awarded IT Bond funding in FY01, and the project is one of the high-priority EGov projects. The project was named CASS for CORI Automated Screening System.

CASS was divided into two phases to minimize the impact on staff and customers. The first phase included automating the "screening" and distribution of CORI requests. Generally, non-criminal justice agencies receive only a portion of the record and some data had to be redacted. Prior to automation, this was a manual process that required attorneys to review and redact. Software was developed that could read the non-standard language of a criminal record and determine the status of the record, thereby eliminating the need for the attorney review. The second aspect of phase 1 addressed the automatic printing, sorting, and distribution of records for return to the requesting organization. This part of the project was also successful, as demonstrated by the fact that the CASS program prints and distributes approximately 3000 records per day without any intervention by CORI staff.

The second phase of the CASS project involves utilizing the Internet to allow organizations to become approved to conduct CORI checks and to allow approved requesters to submit and receive CORI checks over the Internet. It is anticipated that Phase 2 will tremendously improve the processing of criminal records, both by reducing the amount of paper requests, and by significantly decreasing the turnaround time associated with the mailing process. This will streamline the CORI certification, making it much more efficient. It will also allow the CORI Unit to meet the Commonwealth's growing demand for CORI access. CHSB expects to implement the second phase in September 2001.

### Short Takes: Other Public Safety IT Successes

In a joint effort between the Criminal History Systems Board and the Massachusetts State Police, a **Store and Forward System** has been implemented to create an electronic link between an arrest event and the associated fingerprint record. Whether the transaction is a fingerprint submission to AFIS (Automated Fingerprint Identification System), demographic/incident data for repository files, or an identification response being returned to the inquiring agency, the Store and Forward server insures the delivery of the data to the appropriate location.

In FY2001, the **Criminal History Systems Board**, in conjunction with the Massachusetts State Police, implemented the final Interstate Identification Index, or Triple I, requirements. CHSB became a **Triple I participant** in June, the culmination of almost ten years of work on the part of the Executive Office of Public Safety and all of the agencies within the Commonwealth involved in the criminal justice process. Triple I is the FBI's nationwide, automated "pointer" system for criminal record information. To be a participant, a state must be a sole-source contributor of criminal fingerprint cards to the FBI's Identification Division and must have an automated system in place to respond to requests for criminal records made through the Index.

The **Registry of Motor Vehicles** launched an aggressive online program to provide better customer service for Massachusetts residents. During the past year, the RMV has **overhauled its online presence**, adding two new transactions and creating an easily navigable transaction-focused web site. In addition, the Registry began a low cost, high visibility marketing and branding campaign, changing the name of the site from [state.ma.us/rmv](http://state.ma.us/rmv) to the more easily memorable and marketable brand name, [massrmv.com](http://massrmv.com). By "driving" customers to [www.massrmv.com](http://www.massrmv.com), the Registry has essentially made customer service self-service and still managed to increase the convenience factor for the consumer. In addition, estimated waiting time at RMV offices is posted on the web site so that customers still wanting to conduct their Registry transactions in person can check to see where lines are shortest.

*Continued on page 20*



## **ENTERPRISE APPLICATIONS RESOURCES**

---

### **GILS Project**

ITD managed the requirements analysis for a GILS (Government Information Locator Service) implementation for the Commonwealth. Based on a standard developed by the federal government, many states are adopting GILS servers to enhance the ability to identify and locate information created and published by state agencies. GILS services are most commonly used for enhancing searches for materials published on the web and finding published and archival materials in paper collections. As a central directory service, it can also be used for related purposes, such as managing public records law rulings or agency publishing schedules. More information on GILS can be found at <http://www.gils.net/>.

ITD worked with representatives from the State Library, the State Archives, the Supervisor of Public Records, and others to develop the business and functional requirements. The analysis focuses on existing systems to see how they would be integrated, options for efficiently incorporating web publications, and identifying potential future uses. A GILS implementation is being planned for FY2002 for use as the subject taxonomy for the **Mass.Gov** portal.

### **The Commonwealth's ePayments Shared Service Project**

The Information Technology Division (ITD) is developing a statewide ePayment shared service that will initially provide a centralized service for the Commonwealth to process credit cards. The ePayments Shared Service will eventually allow departments to process any type of ePayment (credit cards, debit cards, smart cards, e-checks, etc.) from any source (web, PC application, mainframe, IVR, POS, etc.), including the statewide portal and other EGov applications. Additionally the ePayment service will assist departments in reconciliation, reporting and backend processing to MMARS, the state's accounting system. The goal is to provide a simple standard interface with minimal work for the business application programmer that can be easily adopted from any platform.

The first phase of this project will process credit cards only. Additional phases will enhance the system's capabilities to accept other ePayment types.

The project is being completed in partnership with the Human Resource Division (HRD). HRD is building an

online web application to collect civil service exam fees over the Internet.

Release 1 of the system is scheduled to go live in October of 2001.

### **CommonHelp Update**

The CommonHelp technical support team has extended their hours of operation. Technical Support will be provided from 7:00am to 7:00pm, Monday through Friday, effective September 4th. Additional staff have been hired and trained to provide support for the MassMail project and to cover these additional hours.

As changes are implemented, the helpdesk wants to be sure of continuing to meet customer service needs. A Customer Service Satisfaction survey has been developed to gather information on the quality of service being provided. The survey can be accessed at <http://www.itd.state.ma.us/helpdesk/survey/survey.asp> whenever a user wishes to provide feedback.

### **CommBridge**

The Communications Bridge (CommBridge) has been deployed to many agencies during the past year. It is now being used for over ninety interfaces among more than thirty departments. CommBridge, built on IBM's message queuing product MQ Series, allows the Commonwealth's diverse applications to "talk" to each other in spite of differing platforms, protocols, and technologies. It provides a uniform and consistent approach, allowing systems to communicate in the same manner without knowing what platform is at the other end. CommBridge simplifies the task of connecting applications across unlike environments. Developers focus on business logic, while MQ Series manages the connections to computer systems. CommBridge protects information - it guarantees the delivery of data, once and only once, even when applications or networks are unavailable. It also has an encryption interface so messages can be encrypted using public key cryptography.

*Continued on page 22*





# ENTERPRISE COMMUNICATION SERVICES

### Outlook Web Access

Did you ever want to check your Commonwealth email account from a location other than the workplace? Well, if you're a MassMail user, starting in late September your needs will be answered with Outlook Web Access (OWA).

OWA is a value-added feature of the MassMail environment. It provides a secure environment for users to access their Exchange 2000 data by using an Internet browser and was designed for roaming/remote access users. OWA will require a remote machine to be protected by current anti-virus and personal firewall software. MassMail users will be able to access their email, calendars and contacts through practically any computer connected to the Internet and running Internet Explorer 5.0.

Don't be confused though. OWA is not Virtual Private Networking (VPN). People who require remote access to applications and network resources will still need to use VPN on a secure client. But for those people who just need access to their Exchange 2000 resources, the wait is almost over.

ITD is currently testing the account policies and security options at the Massachusetts Information Technology Center in Chelsea. Watch for the rollout of OWA in late September. For more information, contact John Loycano, (617) 626-4529, [John.Loycano@state.ma.us](mailto:John.Loycano@state.ma.us).

### Enterprise Security Board

The Commonwealth's introduction of the electronic government portal opens a virtual Pandora's box, providing greater opportunity to those who want to steal, misuse, destroy, or corrupt information for personal or political gain. As the owners or managers of agency information assets, Commonwealth staff recognizes its responsibility if information is compromised or made unavailable, whether as the result of being improperly maintained or disseminated illegally to the detriment of the Commonwealth's citizens who have entrusted us with their personal information.

Given the charge and desire to support the information enabling community, ITD has established an Enterprise Security Board to establish an enterprise approach for securing and managing information. Two important and related first steps include the development and dissemination of an enterprise security policy and the

implementation of a policy-based, shared security service, whose purpose is to assist citizen, business, and state employee access to Massachusetts' **Mass.Gov** on-line services.

Success is contingent on the recognition that all Massachusetts government agencies are residents of the same community, regardless of jurisdictional boundaries. An Enterprise Security Board has been established with representation from a cross-section of state government including staff who are comfortable and knowledgeable from security, business, and/or technology perspective(s). This group will oversee the development of enterprise security policies for the new portal, including the shared security service, and will select the vendor and tools to implement the security policies.

### MassMail Migrates Charter Agencies

Beginning in late 1999, the Commonwealth of Massachusetts began looking at ways to centralize and standardize the disparate directories and messaging platforms onto the new, emerging Commonwealth standard: Microsoft Windows 2000 Active Directory (AD). With Exchange 2000 poised to be the first enterprise application to fully leverage the directory, the Commonwealth began to build the foundation for the eGovernment initiative. As a result, the Commonwealth partnered with Microsoft Consulting Services to design and implement a new enterprise system to facilitate the Commonwealth's migration to a new file, print, messaging, and application environment based on the Microsoft Windows 2000 Platform that would be the core infrastructure for future eGovernment initiatives.

Then in April 2000, the Commonwealth launched a 4-year phased implementation called MassMail:

- Apr 2000 - June 2000 Discovery phase. A comprehensive study of the existing messaging systems throughout the Commonwealth.
- Jun 2000 – Jan 2001 Design Phase. Microsoft Consulting Services created a system design of the Windows 2000 and MassMail environment.

*Continued on page 22*



## **OPERATIONAL SERVICE BUREAU PREPARES FOR NEW TECHNOLOGY**

Many and varied new and shared services will be required to support the electronic government initiative and the ITD Operational Service Bureau is preparing to meet the challenge. All of the Operational Service subgroups – Security, Networking, Infrastructure, Business Relationship Management, Computer Operations and Research/Development – know that they have to be ready to respond quickly to new requests.

The Data Center is preparing to maintain an inventory of switches, servers, and operating system software to enable it to meet the abrupt timeframes. Well prepared staff also is required for readiness to work with the “on demand” response times. Data Center staffers are pursuing training and certification in a variety of technologies to increase their readiness for the increasingly demanding technical environment.

One of the new technologies being evaluated at the Data Center is the Storage Area Network wherein any server in a given environment should be ready to pick up the load as needed. The user should not care where their data resides as long as it is secure, available and backed-up.

The introduction of EMC technology allows maximum storage flexibility with guaranteed up time. The hardware and software can snap a picture of a database in seconds while permitting the online applications to keep running. System availability may not be quite 24 by 7 but up time is 99% – barring major failures. These new concurrent and high-speed backup capabilities allow applications to start earlier and stay up longer.

For MassMail’s messaging, the Data Center has sophisticated hardware and software to ensure appropriate service levels for customers: instant response, backup, recovery, etc. In the mainframe legacy system arena, staff is readying hardware, operating systems, software and storage to position itself for higher workload and for web enablement of legacy applications.

Operational Service Bureau is in the process of implementing software alert systems using new technologies with greater flexibility in how systems are managed and how communications are handled. This includes the latest monitoring and reporting techniques for NT.

The Customer Relationship Management group will be expanded to beef up customer service and provide more customer representation at the Data Center. The Enterprise Security group is working with a security

committee of agency participants to address electronic government issues, such as choosing vendors to provide public key infrastructure (PKI) services.

Research/Development is exploring new technology such as wireless access to MassMail.

In addition, OSB is developing an operations brochure to outline for customers the range of services offered. They are also developing a services matrix that will cross-reference hardware, software, operating systems, standards, and tools to clarify the offerings.







# DPH PROCESS HELPS ENSURE IT PROJECT SUCCESS

Each year, Commonwealth agencies invest millions of dollars in technology projects. Unfortunately, it is a fact of life that not every project goes as planned. In order to help ensure IT project success, the Department of Public Health (DPH) has implemented a standardized Systems Development Process (SDP) that is now being used throughout the agency.

DPH is made up of nine separate bureaus with a diverse range of activities. These include prenatal care, violence prevention, emergency medical services, substance abuse treatment, AIDS treatment and prevention, tobacco control, cancer screening, care for disadvantaged citizens in four public health hospitals, health care quality assessment, and environmental health, among others.

Under the SDP, all DPH IT Projects in excess of \$100,000 must follow a standard procedure. "The SDP provides a roadmap to success for all of our bureaus," said Bob Lebel of DPH. "Our CIO, Bill O'Callaghan wanted to develop a process with sound repeatable methodology that would make it easy for people to know what needs to be done when developing a system."

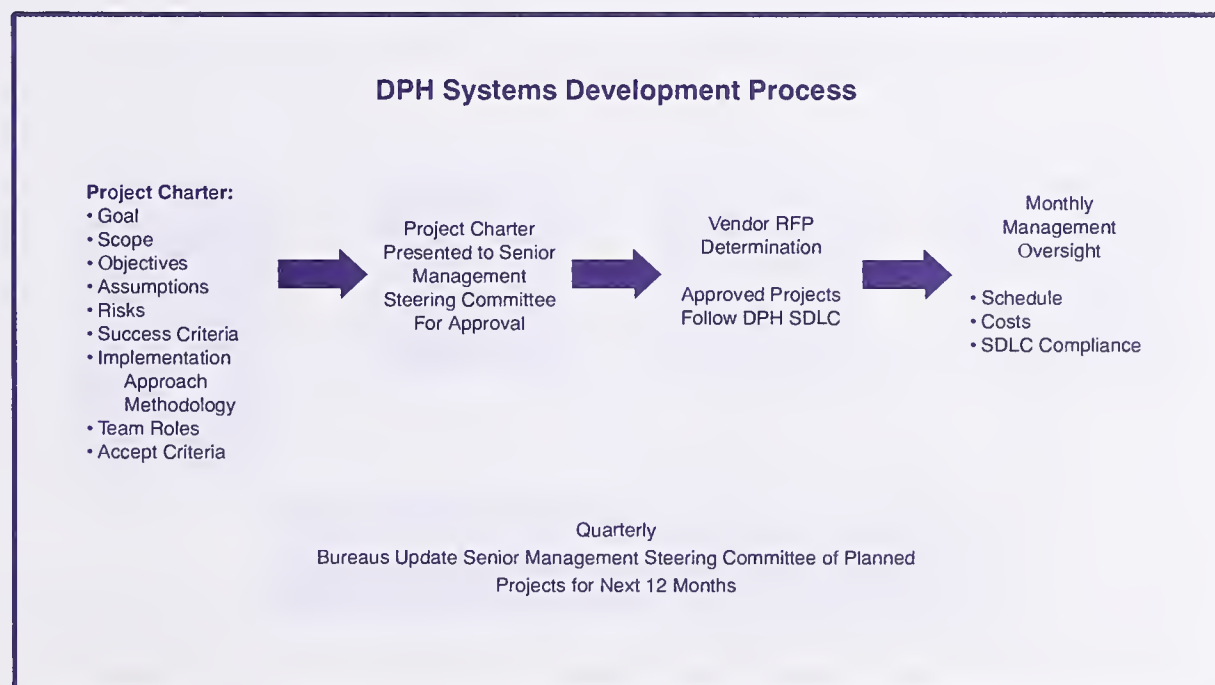
With the SDP in place, IT projects must follow a standard request, oversight and approval process. The initial step in the process is the creation of a project charter, which is intended to help agencies bring forward

projects for approval. The Project Charter includes a number of project criteria such as goals and objectives, scope, assumptions and constraints, risks, implementation strategy, team roles and deliverables. The charter is then presented to a Systems Steering Committee comprised of senior management for approval. Approved projects must then follow a Systems Development Life Cycle (SDLC).

The SDLC further defines the development process using a six component process: Project Initiation, Concept Definition, Functional Definition, Structural Design, Development and Deployment. The Systems Steering Committee oversees project schedules, costs and SDLC compliance throughout the project.

"This process is designed to ensure project success by using a standard process with oversight. Problems during the project are identified and addressed as they occur," said Mr. Lebel. In addition, the Department has also developed a standard agreement for its vendors. This agreement identifies a list of deliverables and payment schedule, and includes a 15% holdback to ensure all provisions of the contract are met.

Now in place for just over one year, the SDP has been successfully utilized to ensure that projects are completed on time and within budget. In fact, said Mr. Lebel, "there have been no project cost or schedule overruns since the SDP has been in place."





## IT BOND II FY2001 PRELIMINARY EXPENDITURES

Project Name	FY2001 As of 8/8/2001 Expenditures
Electronic Commerce	\$6,648,899
MAGNET	\$6,261,238
Community Communication Servers	\$4,500,000
Digital Mapping/Communications	\$2,877,761
Conversion to Digital Technology	\$2,853,099
System Migration & Office Automation	\$2,596,983
Project Intercept/Common Client Targeted Cities/Early Interv. Doto Sys.	\$2,572,355
Inmate Record Imaging and Archiving	\$1,927,000
Firearms Licensing and Imaging (FLIP)	\$1,449,106
Strategic Planning & Management	\$1,258,753
Reengineering of the CHSB Systems	\$1,248,497
Single Tax File	\$1,227,981
Campus Infrastructure Upgrades	\$1,100,000
Imaging Platform Upgrade	\$998,904
UMASS - Massachusetts Information Turnpike Initiative (MITI)	\$949,823
Integrated Legal & CJIS System	\$924,812
Integrated License & Document Management System	\$741,126
Distance Learning Across Campuses	\$726,718
Local Services Online Govt	\$620,747
Automation of Audit Preparation	\$609,043
HR/CMS	\$605,731
Systems Integration Project	\$567,794
State Police Information Network (SPIN)	\$529,359
Electronic Filing System	\$500,000
Facility Management Information System	\$491,760
MassBusNet	\$439,909
Law Enforcement Technical Training Centers	\$424,148
Public Library for the 21st Century	\$393,407
Regional Fiber Optic Network Extension	\$340,000
State Lab E-Govt	\$316,221
Major IS Development Projects	\$293,873
Magnetic Storage	\$220,000
Web Enabled Fisheries Licenses	\$156,542
Senate Automation Projects	\$151,460
Web Enabled MEPA and DFA's Licensing	\$126,865
Projects < \$100,000 per (total of 10)	\$433,118
<b>Total IT Bond II FY2001 Preliminary Expenditures</b>	<b>\$48,083,032</b>





## PRELIMINARY FY2001 IT SPENDING

Executive or Constitutional Office or Branch	Gross Operating Expenditures	Gross Capital Expenditures	Trust Expenditures	Federal Expenditures	Grand Total
Health & Human Services	\$66,071,077	\$6,820,070	\$9,293,948	\$7,907,852	\$90,092,947
Higher Education	\$15,475,297	\$4,064,874	\$66,654,555	\$42,013	\$86,236,740
Administration & Finance	\$29,732,916	\$18,368,745	\$6,072,978	\$12,742,604	\$66,917,243
Public Safety	\$26,848,234	\$23,292,801	\$3,771,790	\$3,131,240	\$57,044,065
Treasurer & Receiver General	\$19,835,929	\$34,000	\$761,718	\$0	\$20,631,647
Judiciary	\$11,350,677	\$8,251,650	\$3,313	\$6,807	\$19,612,448
Department Of Education	\$6,643,343	\$9,337,707	\$276,888	\$1,478,655	\$17,736,593
Labor	\$1,105,227	\$30,568	\$3,997,224	\$8,569,965	\$13,702,984
Environmental Affairs	\$4,110,480	\$6,637,136	\$53,112	\$745,916	\$11,546,644
Secretary Of State	\$5,333,433	\$2,663,408	\$3,527	\$28,358	\$8,028,726
District Attorney	\$3,502,897	\$861,547	\$215,317	\$147,176	\$4,726,936
Transportation & Construction	\$912,910	\$3,611,829	\$25,713	\$0	\$4,550,452
Joint Legislative Expenditure	\$2,567,650	\$1,973,416	\$0	\$0	\$4,541,066
Sheriff's Departments	\$2,950,933	\$900,972	\$0	\$179,589	\$4,031,493
Consumer Affairs	\$1,613,750	\$1,023,236	\$497,868	\$2,348	\$3,137,202
Elder Affairs	\$2,449,731	\$4,236	\$0	\$11,793	\$2,465,759
Office Of State Comptroller	\$202,568	\$1,360,659	\$0	\$0	\$1,563,227
Attorney General	\$1,056,836	\$0	\$63,069	\$32,964	\$1,152,869
State Auditor	\$362,154	\$542,559	\$43,000	\$0	\$947,713
Board Of Library Commissioners	\$739,416	\$0	\$0	\$28,345	\$767,761
Campaign & Political Finance	\$140,793	\$500,000	\$0	\$0	\$640,793
Communities & Development	\$61,685	\$28,941	\$306,547	\$8,638	\$405,810
Economic Affairs	\$345,147	\$33,920	\$23,027	\$0	\$402,094
CTR/FAD Accounting Entities	\$0	\$0	\$0	\$248,617	\$248,617
County Expenses	\$0	\$0	\$172,630	\$0	\$172,630
Governor	\$158,227	\$0	\$0	\$0	\$158,227
Ethics Commission	\$118,123	\$0	\$0	\$0	\$118,123
Inspector General	\$31,224	\$55,662	\$0	\$0	\$86,886
Disabled Persons Protection Com	\$59,002	\$0	\$0	\$0	\$59,002
Low-Lvl Radioactive Waste Management	\$23,393	\$0	\$0	\$0	\$23,393
Commission of Status of Women	\$10,264	\$0	\$0	\$0	\$10,264
<b>Grand Total</b>	<b>\$203,813,314</b>	<b>\$90,397,934</b>	<b>\$92,236,226</b>	<b>\$35,312,879</b>	<b>\$421,760,352</b>

### Notes:

Accounting Fiscal Year 2001 Expenditures as of August 3, 2001 including the following object codes:

E07, E08: Phone expenditures and chargeback

E09: Software and licenses

E10: Data processing chargeback

H03: Contracted IT professionals (including Medicaid processing system)

E11, J08, K01: IT cabling equipment and supplies

K08: Telecommunications equipment

K12: TV Broadcasting equipment

L01, L21: IT equipment lease-purchase or rental-lease

L12, L32: TV Broadcasting equipment lease-purchase or rental-lease

L41: IT equipment maintenance and repair

L48: Telecommunication equipment maintenance and repair

L52: TV Broadcasting equipment maintenance and repair

### Does Not Include:

Salaries for State technical staff



# FAREWELL TO IT BOND II - HAIL IT BOND III

IT Bond II was enacted on August 9, 1996 for approximately \$310 million dollars. The bond bill was subdivided into the following groupings: Better

Government, Public Education and Public Safety. In it's lifetime, the bond supported many worthwhile projects. Better

Government projects included: MAGNet, Electronic Commerce, EMall, BEACON, SPORT, and many, many more. Some of the Public Education

projects funded were: Massachusetts Information Turnpike Initiative, Campus Network Infrastructures, and Community Communications Servers. Projects in the Public Safety grouping included: State Police Information Network, Inmate Record Management System, Law Enforcement Technical Training Centers, and Firearms Licensing & Imaging Project. IT Bond II has now

entered its seventh fiscal year and is in the process of being de-authorized. A new bond bill, IT Bond III, will be replacing it.

IT Bond III was filed on June 7, 2001. The bill is for a total of \$300 million and is subdivided as follows:

E-Gov	\$ 95M
Major Projects	\$135M
MassMail	\$ 15M
2 <sup>nd</sup> Data Center	\$ 25M
Wireless Network	\$ 30M
<b>Total</b>	<b>\$300M</b>

Projects included in the new bill include: E-Gov projects noted in the E-Gov Strategic Plan and Roadmap ([www.mass.gov](http://www.mass.gov)), MMARS Replacement, Comm-PASS, Vital Statistics Integrated, and many more. So what is the present status of the bill?

The Long Term Debt Committee has taken an approach to ensure that funding should continue uninterrupted during FY02. The approach was to split the bill into two parts, A and B: Part A representing total FY02 needs (\$75M), Part B representing the balance of funds. The Committee has approved Part A and has recommended it to Ways and Means. Part B will be discussed in more detail in the Fall.



## Public Safety Agencies Pursue EGov Goals, *Continued from page 13*

The Massachusetts Police Accreditation Commission has set up an interactive website, [www.communityzero.com/mpac](http://www.communityzero.com/mpac), that allows a group of people to communicate and exchange information over the Internet in a private and secure area. Membership in [communityzero.com/mpac](http://communityzero.com/mpac) is restricted to agencies enrolled in the Massachusetts Police Accreditation Program; there is no fee for joining. [Communityzero.com/mpac](http://Communityzero.com/mpac) consists of several pre-formatted categories for posting information: Note Board, Discussions, Upcoming Events, File Sharing, Shared Lists, Opinion Poll, and Image Gallery. For more information, contact Donna Taylor Mooers at 781-942-4805 or at [donna.taylor@eps.state.ma.us](mailto:donna.taylor@eps.state.ma.us).

The Executive Office of Public Safety (EOPS) has reinstated the Local Law Enforcement Systems Improvement Grant Program under which grants are available for efforts in four systems improvement purpose areas: participation in the National Incident-Based Reporting System (NIBRS); purchase and

improvement of Records Management Systems; purchase of Mugshot Equipment or Integration of Electronic Mugshot with Fingerprints; and any other area identified by the department in need of systems improvement. The program will operate during fiscal 2002 and the grants require a 25% match by local departments. For more information, contact Diana Brensilber at 617-727-6300, x 25325.

The Massachusetts Criminal Justice Training Council (MCJTC) has completed its third IT site for police training at the Agawam police academy. This site is a forty-seat computer training lab. The two earlier sites are located in Reading and Boylston, a fourth is planned for Weymouth, and a final computer laboratory is targeted for the Plymouth County Sheriff's Department. As various local police departments invest in more computerized record keeping and the use of mobile laptops, the computer labs enable the required relevant training.



---

## **State Comptrollers Office Upgrades**

### ***Continued from page 10***

For example, MASSfinance now:

- Includes the contract number that goes with a payment.
- Includes a download capability within Payment History.
- Includes an area devoted to the Comptroller's EFT campaign, which allows vendors to fill out a form on-line and print it.

The Cities and Towns area of CommonCents originally provided a web-based payment information system for Commonwealth municipalities. The Cities and Towns view of the application, now gives municipalities access to their Commonwealth payment information at several levels: State appropriation line item, transaction detail, or sorted by cherry sheet/non cherry sheet categories at a summary level. Based on user feedback from the Commonwealth's cities and towns, OSC recently added federal catalogue numbers to the payment information. In addition, certification of payments to cities and towns is requested annually by public accounting firms. Currently, a web application for this process is in development.

In 1999 the MASSfinance Internet site won the Outstanding Project Award from the National Association of State Auditors, Comptrollers and Treasurers (NASACT), an organization for state officials who deal with the financial management in state government.

In 2001 the MASSfinance Internet site won an Explorer Award for the Best Practices in State Government from E-GOV, the sponsors of e-GOV digest and conferences. There were over 300 world wide entries to this contest. MASSfinance participated in an all-Government exhibit at the E-Gov 2001 Exposition in Washington DC.

### **Intercept**

Intercept is an automated process that matches eligible payments to delinquent debt for individuals and organizations that function both as vendors to and payees of the Commonwealth. Matched payments offset the debt either in whole or in part, until the debt is retired. Over \$22 million in intercepted payments have occurred since the implementation of this program in 1995.

OSC has widened the scope of current Intercept functionality of the Billing and Accounts Receivable

Sub-System (BARS) of MMARS by extending intercept to the Commonwealth's institutions of higher education.

The principal reason that these sites did not use Intercept functionality in the past is the requirement that the BARS detail billing function be used in order to post debt on MMARS and to the Intercept system. Schools utilize their own billing systems for tuition, fees and loans; this requirement would have meant double record keeping and monitoring.

Schools have also used debt collection agencies for many years with varying degrees of success. Enhancements to the Intercept program made this year enable schools to send files of delinquent debt to both debt collection agencies and to the Intercept program at the same time. Currently eight of the State Colleges are participating in the pilot. As of June 24, 2001, they have collected approximately \$38,000 in delinquent debt through the Intercept program. In order to expand the Intercept program to additional entities, OSC has designed a web-based application as a single standardized data transmission, processing, payment and reporting module that supports an infinite number of entities owed debt and the payment sources which may be offset to clear the debt.

Barbara Mirabello, Director of the Bureau of Technical Services, stated, "OSC has taken great pains to ensure that the security of this application is maintained and is using Virtual Private Network security. The VPN solution also permits access to entities outside of the MAGNet firewall. The Office has developed an application security policy to ensure that this application and those developed in the future will incorporate the highest level of embedded security."

OSC staff is continuing to serve and support several committees and working groups dedicated to Mass.Gov, the Commonwealth's enterprise portal currently under development. In addition, OSC is collaborating with several departments to implement the e-Payments shared service API (application programming interface). This will enable Commonwealth departments to integrate their payment collection applications to MMARS. Other projects underway for FY2002 are: Vendor Self-Service, GASB34, Central Business Registry, and Electronic Customer Relationship Management. All of these applications will be integrated into the Mass.Gov portal.

---

## **UMass Advances Networking, Distance Learning & Libraries**

### ***Continued from page 8***

- **Digitization Projects:** Each campus undertook projects to digitize and create databases for unique collections. Examples include:

- ◆ At UMass Amherst, photographs from the Horace Mann Bond Papers, W.E.B. Du Bois papers.
- ◆ At UMass Boston, digitization of Art History Slides, and the Francois Sully Photograph Collection.

- ◆ At UMass Lowell, The Center for Lowell History website, and Bringing History Home collection.

- ◆ At UMass Worcester the library converted original glass slides from the original research in genetics and reproductive studies carried out by Doctor Gregory Pincus.

- **Campus Integration:** Three campuses purchased the Docutek software package "Eres" and have implemented an electronic reserves program, which provides remote electronic access to reading materials for distance education and traditional classroom assignments.

---

### **Enterprise Applications Resources/CommBridge, Continued From Page 14**

Since the implementation of HR/CMS, CommBridge has been used to transfer data between HR/CMS and the statewide systems including GIC, State Treasurer's Office, MMARS and PCRS. Another CommBridge project is underway to implement similar interfaces between these statewide systems and the new UMASS PeopleSoft system. Another new system that will soon be using CommBridge is Department of Revenue's Single File System which will simplify the reporting requirements for employers who are currently required to file separate withholding returns and wage data to DOR, and unemployment insurance contributions, work force training and unemployment health insurance contributions to DET. CommBridge is being used for the interfaces to agency legacy systems to process the transactions. Other new interfaces using CommBridge include Public Safety Interfaces and Intercepts.

In addition, new functionality has been added to CommBridge. Deferred and real-time functions are now available for use with the Component Object Model (COM). Therefore it can be used by many Microsoft or Windows applications such as Visual Basic applications. CommBridge can also be used to transfer images. Another enhancement now allows CommBridge traffic to be securely passed over the Internet. Lastly, a tool to better monitor the CommBridge infrastructure has been deployed.

Future projects in the planning stages are several enhancements to the CommBridge application infrastructure to facilitate implementation of the EGov initiatives which require integration between Web-based and back-end legacy systems.

---

### **Enterprise Communication Services/MassMail Migrates, Continued From Page 15**

- Feb 2001 – Mar 2001 Pilot/Proof of Concept. 250 Commonwealth employees from the Information Technology Division migrated to the new system.
- Mar 2001 – Jun 2001 Charter Agency Migration. Over 6,000 Commonwealth employees from 24 state agencies migrated to the new system. Each agency contracted a software integration vendor to perform the migration.
- Future Plans. In FY2002, the Commonwealth plans to migrate an additional 15,000 users to the MassMail system. In FY03, an additional 10,000 users will be migrated.

MassMail is much more than just an email system. It takes full advantage of the power of Microsoft Windows 2000 Active Directory (AD), enabling system administrators to create an enterprise directory, a single point of management for all messaging and network resources, including e-mail and mailbox information, configuration information, files, peripheral devices, host connections, databases, Web access, users, and more. AD is an enterprise-class directory service that is highly scalable, built using Internet-standard technologies, and fully integrated with Exchange at the operating system level. While administrators reap the benefits of unified administration, knowledge workers accustomed to accessing the Exchange Server directory, called the Global Address List, experience no user interface changes and require no retraining when moving to AD.



---

## MESSAGE FROM THE CIO

---

We might have titled this whole issue “Metamorphosis”. Starting with the Governor’s opening sentence, “We’re changing the way we do business in Massachusetts”; through CLEAR’s new legal challenges; and UMass’ Distance Learning Initiative which started out being about classrooms with sophisticated video-conferencing equipment, but now also includes UMassOnline’s multimedia hardware and software; and the synergy of the ePayments Shared Service enabling fees for Civil Service exams to be paid online; and the Government Information Locator Service (GILS) that will provide the subject taxonomy for the Mass.Gov portal; right up to de-authorizing IT Bond II and the filing of a new IT Bond III – it’s all about change.

Information technology professionals are in the business of change – so this should be nothing new. But it is new. We used to apply change by discovering what the users did and automating it. Now we seek to streamline the business process and to eliminate redundancy through the use of technology. With EGov, we need to take the enterprise view, rather than limiting our view to individual agencies.

The role of IT and of the top IT person has changed dramatically. Instead of implementing decisions made by the organization’s business leaders, the CIO is now involved in making those business decisions and in reshaping the business process. When it comes time to implement, speed and flexibility are crucial as business change will not wait on technology. But the CIO’s effectiveness depends not on technology, but on leadership in business decision making.

The EGov effort seeks to change the delivery of government services by taking a top-down approach to looking at government services from the perspective of the real end user, the customer. The EGov effort presumes that there are good reasons to make online services more intuitive. The Managing for Results Initiative (MRI) takes a bottoms-up approach with front-line staffers examining processes at the operational level and asking why the overlaps and redundancies are there. EGov wants to make services more intuitive. MRI wants to make providing the services more efficient and results oriented. Both efforts cry out for technical leaders who sit in the middle with other senior managers who are actively involved in reshaping the business process. These are indeed exciting times.

David Lewis

## INFORMATION TECHNOLOGY DIVISION

One Ashburton Place, Room 801  
Boston, MA 02108

Presorted  
First Class  
U.S. Postage Paid  
Permit No. 2226  
Worcester, MA

The Information Technology Bulletin is a quarterly newsletter of ITD's Strategic Planning Group. One of the SPG's tasks is to act as a clearinghouse for IT information. This publication furthers that goal. Please send correspondence to Managing Editor, Elaine Socha, the Information Technology Bulletin, Room 801, One Ashburton Place, Boston, MA 02108

Voice: (617) 626-4425  
FAX: (617) 727-3766  
Email: Elaine.Socha@state.ma.us

This publication is also available on the web at  
<http://www.state.ma.us/itd/bulletin/>



Printed on Recycled Paper

Next Publication: Fall 2001

If any part of the address on this newsletter is incorrect, mark the changes on a photocopy and send or fax the copy using the information in the upper left.

## ITD PUBLICATIONS

---

The Information Technology Division of the Executive Office for Administration & Finance issues many publications such as: this newsletter; job openings at ITD; information technology standards, guidelines and policies; project reports; technical bulletins and manuals; and so forth.

The place to find these publications on the public Internet is:

<http://www.state.ma.us/itd/>.

The place to find these publications on the Commonwealth Intranet is:

<http://www.itd.state.ma.us/publications.htm>.

Publication Number 18290, approved by Commonwealth of Massachusetts  
State Purchasing Agent, Philmore Anderson III.



COMMONWEALTH OF MASSACHUSETTS

# Information Technology

A News Bulletin From The Executive Office For Administration & Finance, Information Technology Division

GOVERNMENT DOCUMENTS  
COLLECTION

FEB 24 2002

University of Massachusetts  
Depository Copy

**Mass.gov**  
Your Government, Your Way

## PORTAL IMPLEMENTED

Phase I of the much anticipated **Mass.gov** portal was implemented at the end of November. The theme of the **Mass.gov** portal is to present the formal and official Massachusetts government services offered to the average citizen in an informal easy-to-use presentation — “Your Government, Your Way.”

The **Mass.gov** logo is very simple, yet it embodies the intended combination of formal and official functionality with informal ease of use in the portal. In essence, users do not need to know how Massachusetts government works, they just need to know what they want to accomplish.

According to **Mass.gov** Director, Bob Nevins, “Citizens can easily find information about Massachusetts government through the way the portal is organized. They can quickly view offerings in a particular category of functions and access all the information and transactions that exist for that category throughout government.” Another boon of the portal is making available the many online transactions developed by different agencies over the years through one entrance point. And as new web-based transactions are developed in the future, they too will be accessible through the same portal.

The Phase 1 implementation includes approximately 30 intentions organized into six high level categories and several virtual agencies. The high level categories



Mass.gov Portal

are: *Home & Health, Doing Business, Work & Education, Having Fun, Getting Around, and Your Government.* Some examples of the virtual agencies are: *Housing, Health, Commuting, and Elections and Voting.* Examples of intentions include: *I want to own a vehicle; I want to find a place to live; I want to report an environmental problem; and I want to find a school.* But don't just read about it — check it out at [mass.gov](http://mass.gov)!

Another Phase of portal development will be implemented in January. This phase includes adding more intentions, providing a new application development framework, and including a new way to decentralize content management. And this is just the beginning. As the **Mass.gov** Office staff monitors and evaluates actual usage and gathers additional information through focus groups, they will continue to enhance the look, feel and functionality of the portal.

The portal was designed by the **Mass.gov** team composed of the **Mass.gov** Office at ITD; the vendor team of Titan Systems Corporation, Averstar Group; and New Tilt, Inc.; and a wealth of agency participants in the **Mass.gov** Advisory Board, the Portal Advisory Group, the Access Channel Work Groups, and the Technical Advisory Team.

The following stories describe the composition and contributions of the various team groups.

## INFORMATION TECHNOLOGY BULLETIN VOL. 7 NO. 4, FALL 2001

Mass.gov Portal Implementation .....	1
Mass.gov Office .....	2
Ask The Webmaster .....	3
Mass.gov Project Participants .....	4-5
“Clear” Helps Serve Up Cyber Law Results .....	6
DOR Introduces New Web Application .....	7
IT Investment Planning .....	8
ITD Resources .....	9
Enterprise Application Resources .....	10
EAB Implementing New Software Development Process .....	11
Message From The CIO .....	12



In the last issue of the IT Bulletin, ITD had just established the **Mass.Gov** Office for the development and implementation of the electronic government initiatives. Bob Nevins had been named Director, reporting to Commonwealth CIO David Lewis, and was in the process of putting his team together. Since that time the **Mass.Gov** Office has named four Access Channel Managers:

- The Government-to-Business Access Channel Manager is Susan Parker, formerly Director of Research and Marketing at the Department of Revenue.
- The Government-to-Citizens Access Channel Manager is Alla Wexler, formerly a Product Marketing Manager at Microsoft Corporation.
- The Government-to-Municipalities Access Channel Manager is Kerry Conard, formerly Vice President of Operations at Kelley and Ryan Associates and previously Director of Customer Assistance at the Registry of Motor Vehicles.
- The Government-to-Employees-and-Visitors Access Channel Manager is Heidi Glunz who has been part of ITD's EGov team for the past year following her graduation from the Kennedy School of Government with a Masters in Public Policy.

Sylvia Kauffman continues to lead the development of the **Mass.Gov** portal, working with the Portal Advisory Group and the vendors to define the requirements and guide the portal design. Sylvia, who joined ITD's EGov team two years ago also has a Masters in Public Policy from the Kennedy School.

ITD's Portal Services Group, formerly the Internet Services Group in ITD's Enterprise Applications Bureau and led by Sarah Bourne, has been incorporated into the **Mass.Gov** Office. Sarah is well known to web developers throughout Massachusetts state government since she set up the Commonwealth's original home page in 1995. Sarah's staff includes G. Sam Edo, Bernie Flood, Valerie McKay, and Maryann Perry, who keep the Commonwealth's web pages up-to-date.

According to Bob Nevins, "We've assembled a very talented group of high-energy team players with diverse backgrounds. I'm confident that this group, combined with the incredible support from the cross-entity workgroups throughout state government, will ensure success in meeting our e-government objectives."

## **MASS.GOV TEAM COLLABORATES**

Building an integrated enterprise portal requires a high degree of collaboration. From the outset of the EGov Initiative, more than two hundred people have taken part in this effort. Groups have been comprised of leaders from all three branches of government, as well as representatives from cities and towns, businesses, consumer organizations, and academia. As Bob Nevins puts it, "These other players have willingly stepped forward and made a huge contribution while carrying heavy loads at their own offices. Their time commitment has lead to tremendous work quality while building support and momentum and instilling a wide-spread sense of ownership in the portal."

The **Mass.Gov** Advisory Board is a cross-branch, cross-agency group of senior policy makers from the Commonwealth and representatives from the private sector who provide the leadership necessary to ensure buy-in at the highest levels of government. The Portal Advisory Group is a cross-agency group that served as the review committee for the portal bids and is currently the Steering Committee involved in the design, implementation, and other day-to-day decisions regarding the portal. Each Access Channel Workgroup is comprised of agency representatives with knowledge of the services and customer groups their agencies serve and engaged in developing the content for that Access Channel within the portal. The Technical Advisory Team is a group of ITD senior analysts and managers who provide guidance regarding infrastructure, network connectivity, applications integration, security, policies and customer support.

In addition to the above groups, focus groups and online surveys have also been used to capture the needs of customers, and usability testers are being used to validate the work of the Access Channel Workgroups and portal design decisions. With this new endeavor – collaborative from beginning to end – the **Mass.Gov** team has sought to create a breeding ground for new ideas to continually improve the delivery of state services through a fully integrated portal.

The participants and the groups they participated in are listed on pages 4 and 5.



---

# ASK THE WEBMASTER

---

## **Q: WHAT WILL I NEED TO DO FOR THE MASS.GOV PORTAL?**

**A:** To start with, you need to ... do nothing! The first release of the portal, scheduled for late November, will simply point to existing content on existing websites. The "virtual agencies" and "intentions" pages have hundreds of such links identified. Therefore, if you are planning to move around or rename pages, please let us know so that we may point to the most up-to-date content on your websites. Initially, Mass.Gov will maintain tables of links to your content, but the long-term goal is that you will be able to do that on your own.

We expect that by the third quarter of this fiscal year, agencies should be able to start moving their content to the portal. In the meantime, we will conduct an agency pilot to identify issues related to decentralized content management and to develop a migration strategy.

## **Q: WE NEED TO REDESIGN OUR SITE NOW. WHAT DO WE NEED TO KNOW ABOUT THE PORTAL?**

**A:** As mentioned above, the portal can point to external sites, but the true power and value of the portal infrastructure we are investing in will be found in the content creation and management features that will be available to those who migrate their websites to the portal. Some of the features of the portal include:

- Content creation without HTML expertise
- Ability to publish to the web in real time
- Workflow and content approval chains
- Ability to roll-back content to previous state
- Archival solution to meet public records requirements

If possible, you should refrain from doing extensive or expensive website redesigns during the next year. However, if you have a pressing business need, you should consider these principles:

- Content should be positioned based on your users' perspective. Why do people come to your site? What do they want to find out? What do they want to get done?
- Navigation should also reflect your users' intentions. Can they find what they need without knowing your organizational structure or internal jargon?
- You will probably want your graphic design to be compatible with the Mass.Gov color palette and banner, which we will be providing for placement at the top of web pages.
- You should avoid spending money on applications that mimic portal features. The portal will already provide functionality such as content creation by non-experts for free!

## **Q: THESE ARE PRETTY SIGNIFICANT CHANGES. HOW CAN I BE INVOLVED?**

**A:** Mass.Gov is a true Commonwealth enterprise effort. Many participants from throughout the Commonwealth have been involved in the creation of the portal, primarily through the following four groups which are described in the **Mass.Gov Team Collaborates** story:

- **Mass.Gov Advisory Board**
- **Portal Advisory Group**
- **Access Channel Workgroups**
- **Focus Groups and Usability Testing**

If you are interested in participating in either a focus group or an access channel workgroup, please send an email with your contact information to [mass.gov@state.ma.us](mailto:mass.gov@state.ma.us).

## **Q: WHAT IS THE "PORTAL SERVICES GROUP"?**

**A:** This is the new name for the "Internet Services Group," now in the Mass.Gov Office: same people, same service, new scope!

## PROJECT PARTICIPANTS

*Larry McConnell  
Joan Valley*



Claudia Boldman, Information Technology Div., PAG, T  
Sarah Bourne, Information Technology Division, PAG  
Kendra Bowens, Secretary of the Commonwealth, C  
David Bratton, Executive of Office of Public Safety, PAG  
Nancy Braymiller, Office of the State Comptroller, B  
Sue Bristol, EOTC and Mass. Highway Department, C  
Craig Burlingame, City of Boston, M  
Dan Canney, Division of Employment & Training, C  
Tim Carroll, House of Representatives, C  
Eileen Cazaropoul, City of Worcester, M

Juanita Allen, Human Resources Division, E & V  
Michael Alogna, Exec. Office for Admin. & Finance, AB  
Francis Anglin, Massachusetts Port Authority, AB  
Jan Avallone, Office of Child Care Services, C  
Peter Bates, Exec. Office of Health and Human Services, B  
Geoffrey Beckwith, Mass. Municipal Association, AB  
Bill Bell, Department of Transitional Assistance, C  
Jim Belli, Information Technology Division, PAG  
Martin Bennison, Office of the State Comptroller, AB  
Ellen Bickelman, Operational Services Division, B



*Sylvia Kauffman, Claudia Boldman,  
Tony DelGrosso*



Robert Ciolek, Mass Health & Education Facilities Auth., AB  
Molly Cole, Registry of Motor Vehicles, C, B, M  
Anne Collins, Registry of Motor Vehicles, C, B  
Paul Connolly, Division of Employment & Training, C  
Lee Corte-Real, Department of Food & Agriculture, B  
Stephen Crosby, Exec. Office for Admin. & Finance, AB  
Bernard Crowley, Department of Revenue, AB  
Dave Davies, Department of Revenue, M  
Jennifer Davis Carey, Consumer Affairs & Business Reg., AB  
Tony DelGrosso, Department of Revenue, PAG, B



*Ellen Phillips, Nancy Burke, Kathy Reilly  
and Ellen Bickelman*

Dean DiMartino, Department of Public Health, M  
Matthew Donovan, Office of Child Care Services, C  
Barbara Dortch-Okara, Admin. Office/Trial Court, AB  
Anna dos Santos, Information Technology Division, T  
David Driscoll, Department of Education, AB  
John Driscoll, Central Business Office, E & V  
Steve Dukeman, Department of Revenue, PAG  
Melissa Dullea, Mass Bay Transportation Authority, C  
Laurie Flynn, Secretary of the Commonwealth, B  
Peter Forman, Office of the Governor, AB



Bethann Foster, Information Technology Division, T  
Joe Galluccio, Office of Consumer Affairs, B  
Jon Geer, Dept. of Environmental Mgmt, PAG, E & V  
Albert Gill, Office of Consumer Affairs, B  
Paula Girouard, Department of Education, C  
Rich Glasberg, Information Technology Division, T  
Andrew Gottlieb, Dept. of Environmental Protection, C, B  
Daniel Grabauskas, Registry of Motor Vehicles, AB  
Catherine Greene, Office of Attorney General, C  
Charles Hadley, Department of Public Safety, B



*Portal Services Group: G. Sam Edo,  
Valerie McKay, Sarah Bourne, Bernie Flood*

Linda Hamel, Information Technology Division, T  
Bill Hardin, Office of the State Comptroller, M  
Darrell Harmer, HR/CMS, E & V  
Dawn Heinen, Massachusetts Cultural Council, E & V  
Mark Heumann, Information Technology Division, T  
Donna Hill, Mass Turnpike Authority, E & V  
Bill Hilliker, Group Insurance Commission, E & V  
Dick Horner, Secretary of the Commonwealth, PAG  
Michael Hurley, Senate President's Office, AB, PAG, C  
Jonathan Hyde, Mass Office of Travel & Tourism, E & V  
Kellie Ingram, Dept. of Environmental Protection, M

### KEY:

**AB = Advisory Board**

**PAG = Portal Advisory Group**

**T = Technical Advisory Team**

**Access Channels Workgroups:**

**C = Citizen**

**B = Business**

**M = Municipalities**

**E & V = Employees & Visitors**

Cathy Jackson, Central Business Office, E & V  
Steve Jacques, Mass Turnpike Authority, E & V  
James Jajuga, Executive Office of Public Safety, AB  
Lauren Johnson, Office of the State Comptroller, E & V  
Peter Karg, Executive Office of Elder Affairs, C  
Sandy Kruczkowski, Information Technology Div., PAG, T  
Barry LaCroix, Criminal History Systems Board, B  
Prudence Lange, Housing & Comm Dev., PAG, C, B, M  
Danielle LeBlanc, Office of Treasurer/Receiver General, AB  
Sheila LeBlanc, Department of Revenue, C  
Diane Ledwell, Office of the State Comptroller, PAG



*Prudence Lange, Jeff Ritter, Larry Pizer, Kerry  
Conard, Dave Davies, Barbara Miller, Eileen  
Cazaropoul*



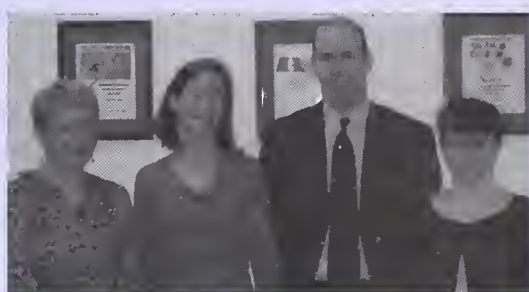
## PROJECT PARTICIPANTS



*Pam Booth, Tom McCullough, Jonathan Hyde, Jon Geer, Dawn Heinen*

Burt Lewis, Department of Public Health, PAG  
David Lewis, Information Technology Division, AB, PAG  
Richard Lord, Associated Industries of Massachusetts, AB  
David Lutes, Executive Office of Environmental Affairs, B  
Barbara Lybarger, Massachusetts Office on Disability, C  
Lou Macinanti, Information Technology Division, T  
David Magnani, Senate, AB  
Jack Maguire, Board of Higher Education, C  
Mary Ann Marshall, Office/State Comptroller, E & V  
Mary Beth Masci, University of Massachusetts, E & V

Elizabeth McCann, Dept. of Env. Protection, C, B  
David McCauley, Board of Higher Education, C  
Larry McConnell, Registry of Motor Vehicles, PAG  
Patrick J. McCormick, City of Somerville, M  
Tom McCullough, Dept. of Economic Dev., B, E & V  
Steve McCurdy, Dept. of Environmental Protection, M  
Cindy McGrath, Group Insurance Commission, E & V  
Laurie McGrath, Department of Revenue, C  
Kimberly McLaughlin, Labor/Workforce Development, B  
Paul McLaughlin, Office of the State Auditor, PAG



*Bob Nevins with Access Channel Managers:  
Susan Parker, Heidi Glunz, Alla Wexler*

Karen O'Leary, Exec. Office/Health & Human Services, C  
Robert Nevins, Information Technology Division, AB  
Ric Page, Registry of Motor Vehicles, C  
Gerry Perry, Department of Revenue, M  
Ellen Philbin, State Retirement Board, E & V  
Nancy Phillips, Operational Services Division, B  
Victoria Phillips, Exec. Office/Environmental Affairs, AB, B  
Laurence Pizer, Plymouth; Pres. of Town Clerks Assoc., M  
Ralph Ragucci, Information Technology Division, T  
Jeff Ritter, Town of Wayland, M

**Mass.Gov**  
Your Government, *Your Way.*

Paul Rodrigues, Commission Against Discrimination, PAG  
John Rourke, Radius Capital Partners, AB  
Anne Ryan, Secretary of the Commonwealth, C  
Andrea Saia, Office of Consumer Affairs, C  
Caroline Sawyer, Criminal History Systems Board, B  
Steve Sebestyen, Registry of Motor Vehicles, B  
Jeff Shapiro, Office of the Attorney General, AB  
Elaine Socha, Information Technology Division, PAG  
Kathie Still, Office of the State Comptroller, M  
Rita Strazzeri, Mass Turnpike Authority, E & V



*Dan Wandell, Dick Sullivan*

**Mass.Gov**  
Your Government, *Your Way.*

Peter Vaughn, Dept. of Transitional Assistance, E & V  
David Villeneuve, SOWMBA, B  
Dan Walsh, Information Technology Division, T  
Dan Wandell, Sec. of the Commonwealth, AB, PAG, B  
Jim Wentzel, Information Technology Division, T  
Stanley Wesolowski, Department of Energy Resources, B  
Dave Westervelt, Fiscal Affairs Division, PAG  
Jeff Wulfson, Department of Education, M  
Frank Zecha, State Retirement Board, E & V  
Eileen Zewski, Division of Employment & Training, B  
Nancy Ziemplak, Office of the State Comptroller, C

**Mass.Gov**  
Your Government, *Your Way.*

Lisa Mead, City of Newburyport, AB  
Eric Mehner, Mass. Commission Against Discrimination, C  
Patricia A. Mikes, Mass. Municipal Association, M  
Barbara Miller, Office of the State Comptroller, C, M  
Barbara Mirabello, Office of the State Comptroller, PAG  
Madeline Mooney, Terra Lycos, S.A., AB  
Holly Moore, House of Representatives, C  
Sean Morrissey, House of Representatives, AB  
Dom Musto, Information Technology Division, T  
Heidi O'Brien, Dept. of Environmental Protection, B



*Prudence Lange, Barbara Miller, Sandy Kruckzowski, Burt Lewis with Jim Belli and Tucker Traft in the background*

Dick Sullivan, Department of Employment & Training, PAG  
Henry Swiniarski, Health & Human Services, AB  
Janice Tatarka, Labor and Workforce Development, B  
Bill Taupier, Department of Industrial Accidents, B  
Ed Thurman, Department of Social Services, C  
Greg Tocco, Department of Public Health, C  
Maureen Trainor, Mass Bay Transportation Authority, C, B  
Rachael Traub, Department of Education, C  
Jack Troast, Dept. of Economic Development, B  
Joan Valley, Registry of Motor Vehicles, PAG



*Mass.Gov Office Staff: G. Sam Edo, Susan Parker, Valerie McKay, Heidi Glunz, Sarah Bourne, Bernie Flood, Alla Wexler, Bob Nevins, Sylvia Kauffman*

---

# “CLEAR” HELPS SERVE UP CYBER LAW RESULTS

---

The inter-branch Cyberlaw E-government Advisory Council (“CLEAR”) facilitated by ITD has addressed a number of legal issues raised by the transition to e-government since its inception in March of this year. CLEAR as a whole and through its workgroups has:

1. Reviewed and distributed to all agency general counsels the National Electronic Coordinating Council’s Record Retention Analysis Under E-SIGN (now fully adopted by NEC3), which addresses the impact of the Federal E-SIGN legislation, which validates certain electronic signatures and records, on state agencies.
2. Reviewed and distributed to all agency general counsel the U.S. Department of Justice’s publication “Legal Considerations In Designing And Implementing Electronic Processes: A Guide For Federal Agencies” (November 2000), addressing the analytic process agencies should go through in deciding whether to use electronic records and signatures and, if they decide to do so, what legal issues they should consider before settling on a technology.
3. Drafted for discussion purposes, through the CLEAR Privacy Workgroup chaired by OSC’s Jenny Hedderman, an Enterprise Privacy Policy that will eventually (after being reviewed by a wider circle of Chief Information Officers, agency heads and legal counsel) be proposed to ANF, the Legislature, the Judiciary and the Constitutional Officers for adoption.
4. Drafted, through the CLEAR Records Management Workgroup, a letter to the Supervisor of Public Records requesting opinions regarding the status under the public records law of numerous “new” documents generated by e-government.

5. Drafted, through the CLEAR Software and Website Development Workgroup, chaired by Harold Fisher, OSD’s Deputy General Counsel, information about how software and website development fit into the Commonwealth’s procurement system, and a set of standards that agencies should use in drafting statements of work for such projects, for release this calendar year.

All of these efforts are focused on one CLEAR goal: providing tools to agency counsel that will assist them in their efforts to provide the best legal advice to their agencies in the transition to E-government. If

you want copies of any of the documents already distributed through CLEAR, or have suggestions about additional legal issues that CLEAR should undertake, please contact ITD General Counsel Linda Hamel at [linda.hamel@itd.state.ma.us](mailto:linda.hamel@itd.state.ma.us) or (617)-626-4404. You can also stop by ITD’s new General Counsel page at <http://www.state.ma.us/itd/legal/index.htm>.





# DOR AND DET TEST NEW WEB APPLICATION FOR BUSINESS



## COMMONWEALTH OF MASSACHUSETTS Employer Filing Made Easier

Working with the state Division of Employment and Training (DET) and the Information Technology Division (ITD), the Department of Revenue (DOR) is testing a pilot program that could become a safe, convenient way for businesses to file and pay all their Massachusetts payroll taxes.

The pilot program allows participating businesses to visit a secure area on the DOR website and find all the information they need to file and pay withholding taxes with DOR, and Unemployment Insurance contributions, Workforce Training Fund contributions and Unemployment Health Insurance contributions filed with DET. Some employers also will submit their quarterly wage reports to DOR using this application.

To use WebFile for Employers, businesses will need to obtain a Personal Identification Number (PIN) from DOR. Once the PIN is received (usually within ten business days) and the company is properly registered, they can find four options on the web page:

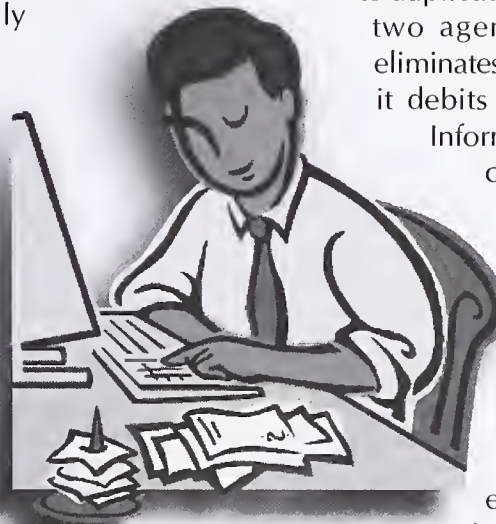
- **File and Pay** allows businesses to file their combined quarterly returns for Unemployment Insurance/Workforce Training, Unemployment Health Insurance and Withholding and pay these DOR and DET obligations.
- **Report Wages** provides the ability to file employee wage reports and receive a detailed confirmation report that can be printed for the businesses' records.

- **Deposit Withholding** lets companies make their weekly or monthly withholding deposits on-line and view previous deposits.
- **View History** provides information on the company's WebFile for Employers account. Businesses can view all transactions made on-line for the current quarter and for the previous four quarters.

If fully implemented, nearly 170,000 businesses in the Commonwealth would be eligible to file electronically, avoiding the time-consuming paper returns now used. Businesses would no longer be forced to duplicate data entry on separate forms for two agencies. Webfile for Employers eliminates the need to write checks because it debits the company's bank account.

Information on filings is available on a confirmation report that can be printed. Perhaps the most attractive feature of the application for businesses is its built-in calculation function. Rate, credit and deferred amounts are kept on file and the total amount due for each quarter is calculated for each business, saving time and helping avoid errors.

WebFile for Employers will serve as a catcher's mitt for collecting information and payments and distributing them. For privacy reasons, each agency has access to only its own customer account information.



# IT INVESTMENT PLANNING FOR FY2002

The information technology investment planning process for Fiscal Year 2002 began in April 2001 with agencies developing investment briefs in conjunction with ITD's Strategic Planning Liaisons. SPG received 248 investment briefs requesting \$201 million for FY02. SPG reviewed these briefs in May and June and awarded funding to 70 projects for a total of \$85 million, the information technology capital cap.

The FY02 cap is approximately 73%

greater than the previous year's initial cap. This increase is attributable to two items: 1)

A 15% overall increase in the state's capital cap; and 2) The Fiscal Affairs Division (i.e., Budget Bureau) confidence in ITD's financial management practices.

With a goal of maximizing the use of the capital cap, SPG conducts a quarterly review of funded projects to verify that agreed to goals and objectives are being met. If not,

SPG seeks to shift funding from projects whose schedules are slipping to unfunded or underfunded projects.

After the second quarter, SPG will shift to a monthly review of funded projects. In FY01, 94% of the capital cap was spent.

Of the awarded \$85 million, \$48 million is for IT Bond II projects, and \$10 million is for the Courts bond bill. Another \$26 million was awarded to IT Bond III projects but not yet authorized pending the Legislature's passage of that \$300 million bond bill.

With the current fiscal crunch, most agencies are not getting operating budget expansion. SPG will be taking a closer look at future operating costs associated with technology investments and may have to rethink those investments if agencies will not be able to fund the associated future operating costs.

SPG is beginning their review of the IT component of agencies' FY02 operating spending plans. Operations briefs will be required for items in excess of \$200,000 to aid the Governor's Office in their review of IT funding requests.

Some of the major projects designated for IT Bond II funding in FY02 are:

**Electronic Government:** This funding covers the Mass.Gov activities described at the front of this issue; EGov shared services [epayments (see the EAB Resources story), security, geographic information system, and e-customer relationship management]; and other agency flanking programs.

**MMARS Replacement:** MMARS is a fifteen-year old system that needs to be modernized to meet the demands of the Commonwealth's financial reporting and analysis; to integrate easily with the EGov initiatives utilizing web centric technologies; and because the existing system's vendor has announced their intention to discontinue support for the old system as it moves to a web architected version.

**Sex Offender Registry Database & Tracking System:** The Sex Offender Registry Board is charged with tracking approximately 18,000 convicted sex offenders living or working in Massachusetts. With IT Bond funding in FY00, SORB built an automated database to track convicted sex offenders to the point of requesting a hearing. This system needs to be extended to track the hearing process, the legal process of appeals, and community notification to police departments with electronic data and images.

**UMass Application Hosting Services:** UMass proposes to create a server farm to allow the entire public education community of the Commonwealth to store and retrieve data and multi-media content near large telecommunications pipes to support their online education initiatives. This will provide a robust technical platform and management method for delivering online education to the University, the State and Community Colleges, and the K - 12 community. This cost sharing approach will lower overall cost per participant.

**Online Educator Licensure & Recruitment:** In the face of a significant educator shortage, the Department of Education has new Certification Regulations that will create alternative routes to become certified as an educator in Massachusetts. Online licensure will not only streamline the certification process but also enhance DOE efforts to connect educators with job opportunities. It is DOE's goal to increase the number of certified educators and to facilitate their recruitment.



FY02 Funded Projects By Category



# ITD RESOURCES

## **“LEGAL RESOURCES” ADDED TO THE ITD WEB SITE**

ITD has added a new “Legal Resources” section to their web site. This revised content is more organized and contains up to date information on pending legislation, E-Sign information, the Cyberlaw E-Government Advisory Roundtable, and legal terms related to electronic transactions. The site can be viewed at <http://www.state.ma.us/itd/legal>

## **NEW PBX CONTRACT READY TO GO**

The ITT-11 PBX Services Contract has been awarded to thirteen category 1 bidders, one yet to be determined category 2 bidder, and eight category 3 bidders (descriptions below). This contract is for the purchase, lease, and service of Premise Based PBX and Key Systems, as well as maintenance service contracts and shared tenant services. A complete list of vendors and services is available on [www.comm-pass.com](http://www.comm-pass.com).



“It was a pleasure serving with a group of dedicated and professional individuals from across many agencies” said Joe Hickey Procurement Team Leader of the RFR.

Three contracts were consolidated into one RFR, producing a well thought out and comprehensive procurement. It will serve as a one-stop shop for telecommunications services. Under this contract, the team chose to set up three categories of services: PBX Systems, Shared Switch (tenant services), and Maintenance Services. Each category is briefly described in the following paragraphs.

### **CATEGORY 1**

PBX Systems: The Purchase or lease of all types of telecommunication systems. This list includes, Key systems, PBX systems, Voice Mail, PC server based systems and, for the first time, VOIP (voice over IP). This category expires June 30, 2003 and has the option of 8 one-year extensions.

### **CATEGORY 2**

Shared Switch: Shared Tenant phone services provided to geographically closely positioned agencies. Service is provided to agencies individually and comes from one system owned by the contractor, thereby reducing redundant systems. This arrangement provides economies of scale and is often more cost effective than agencies owning and maintaining individual PBX systems. This service offers many substantial benefits to include: ease of dialing, trunk consolidation, one step billing, per port payment methods, purchase of services, and needed applications. This category expires June 30, 2006 and has the option for 2 additional 5 year extensions

### **CATEGORY 3**

Maintenance Services: Monthly contracted services of installed base systems. These services include: component installations; and system upgrades and moves, adds and changes, to in place systems. This category is for imbedded systems and not new system sales. This category expires June 30, 2003 and has the option of 8 additional one year extensions

The PMT was aware of new and emerging technologies and included a provision to allow for an open enrollment clause. This enables, at the discretion of the PMT, re-opening the contract for new vendors, thereby allowing new contractors to participate with new products and services.

# ENTERPRISE APPLICATION RESOURCES

## **EPAYMENTS SHARED SERVICE SCHEDULED FOR FALL RELEASE**

The ePayments Shared Service, a component of the EGov program, is a centralized service for the Commonwealth to process electronic payments. Departmental applications that have a payment collection component can plug into a simple standard interface with minimal work for the business application programmer.

The Fall 2001 release of the service will process credit card payments collected through HRD's Civil Service Web Application. This initial release will also include reporting and backend processing to MMARS. Upon evaluating the result of the HRD pilot additional applications that collect credit card payments through the Web will be able to use this service. Future releases of the software will include:

- Additional functionality such as refund processing and enhanced reconciliation;
- Additional types of ePayments such as debit cards and e-checks; and
- Additional collection sources such as through PC applications and IVR (interactive voice response).

ITD and the Office of the State Comptroller, the business owner for ePayments, are in the process of prioritizing these new features.

An enrollment package that will be a comprehensive business and technical guide to the ePayments Shared Service will be released soon. For additional information about the ePayments Shared Service, contact Mark Heumann at 617-626-4461 or at [Mark.Heumann@state.ma.us](mailto:Mark.Heumann@state.ma.us).

## **MAJOR ENHANCEMENTS TO COMMBRIDGE UNDER DEVELOPMENT**

CommBridge, built on IBM's message queuing product MQSeries, allows the Commonwealth's diverse applications to "talk" to each other in spite of differing platforms, protocols, and technologies. It provides a uniform and consistent approach, allowing systems to communicate in the same manner without knowing what platform is at the other end.

CommBridge is now being used for over ninety interfaces among more than thirty departments. The Department of Revenue's Webfile for Employers System (formerly Single File) is using CommBridge for its interfaces with agency legacy systems. Other new uses of CommBridge include the CashTransfer interface for the ePayments shared service, and new interfaces for the Division of Professional Licensure, and for Child Support Enforcement at DOR.

Major enhancements to CommBridge are now in the development phase. These enhancements to the CommBridge application infrastructure are needed to facilitate implementation of the EGov initiative which will require seamless integration between Web-based and back-end legacy systems. In addition, the need to enhance CommBridge is technology driven, to make it easier for use by applications being developed with the latest technology. These enhancements include: the use of XML as the common data representation for CommBridge messages; creation of Java Beans (standard objects) for accessing the CommBridge Paradigm APIs (application programming interfaces); the ability to allow transactional applications to interface transparently with batch applications; and implementation of directory services to simplify deployment and administration. CommBridge will also be enhanced to enable access to infrastructure services such as security using the security shared service.

Another major enhancement under development for CommBridge is the use of IBM's message broker, MQSeries Integrator. This product adds enterprise-level value to messaging-based interapplication infrastructures and is a productivity tool that accelerates the integration process. It allows applications with dissimilar data schemas to communicate with each other. Application programmers will not have to perform the complex tasks of parsing, translating and reformatting data as it moves between applications. MQSeries Integrator uses a database of rules to transform and route messages based on knowledge of the formatting and application logic requirements of applications. A pilot project using MQSeries Integrator will be underway in the near future.

For more information about CommBridge, contact Debbie Seaward at 617-626-4490 or at [Debbie.Seaward@state.ma.us](mailto:Debbie.Seaward@state.ma.us).



# EAB IMPLEMENTING NEW SOFTWARE DEVELOPMENT PROCESS

In order to meet the challenges presented by new platforms such as web and client/server development, ITD's Enterprise Applications Bureau has decided to purchase and implement a new system development methodology with supporting online tools. The goal is to implement the Rational Unified Process (RUP) over the next year.

RUP is a process that covers the entire software development lifecycle, bringing a wealth of up-to-date knowledge to the workstation in the form of an "e-coach". It embeds guidance on many modern techniques and approaches: object technology and component based development; modeling using UML (Unified Modeling Language); architecture; iterative development; testing; etc. RUP can be configured and tailored to an organization's needs, and it supports an extensive palette of online tools.

RUP supports six best practices for software development:

- Manage software iteratively
- Manage requirements
- Use component based architecture
- Visually model software (use cases, etc.)
- Continuously verify software quality
- Control changes to software

There are several major differences between Rational's approach to software development and other more traditional "waterfall" methodologies, such as the Productivity Plus methodology in use at EAB for many years.

In the "waterfall" process, all the detailed requirements are developed first, followed by system design. Testing and implementation follow construction of the entire application. Each phase is dependent upon the completion of the previous phase. The testing phase at the end of the development cycle is the first time that all the aspects of the system are experienced, rather than just analyzed. Problems are inevitable at this point including: late design breakage, late risk resolution, unforeseen implementation issues, and potential schedule and budget overruns.

In an Iterative Development life cycle process such as RUP, risk is addressed early and often. The entire development effort is divided into chunks, each of which is developed to an executable state. It involves doing "mini-waterfall" processes progressively through the life cycle, to address risky areas and architecture up front, minimizing risk by producing demonstrable results early

in the cycle. Fixing problems at this stage has less impact on budget, schedule and quality.

Iterations (chunks) are based on Use Cases, which is a meaningful method for documenting requirements from a user perspective. Use cases that address the highest risks and will allow the chosen architecture to be proven are selected to be part of the earliest iterations, and are built upon throughout the life cycle.

## THE FOUR PHASES OF RUP (RATIONAL UNIFIED PROCESS)

<b>Inception</b> Iterations integrate foundation components of architecture and provide executable framework for critical use cases	<b>Elaboration</b> Iterations result in an architecture and a complete framework and infrastructure for execution
<b>Construction</b> Iterations result in an alpha release (70% of total product) and a beta release (95% of total product)	<b>Transition</b> Iterations to transfer beta release to final product

A committee of EAB managers and staff has been formed to plan and manage the implementation of these new tools. This committee also serves as the basis for a group of "Tool Experts": people who learn and teach the tools in the Rational Suite. Tools include: online framework support and detailed help; modeling; requirements management; software configuration management; issue tracking/change management system; automated functional testing; reliability testing; and test planning and coordination. All of the tools are presented in a suite package and reside on a dedicated server.

Some other tasks for the committee include the evaluation and selection of pilot projects and matching tools/techniques to each one; developing a business case and vision document for the ongoing use of RUP and its tools; mentoring and supporting the pilots; identifying and managing risks; and developing standards, policies and procedures for using RUP and its tools. Each pilot will use selected portions of the framework and certain appropriate tools only, to avoid overwhelming staff with the process. The lessons learned from each pilot will be adapted for the subsequent groups.

EAB has worked with consultants from Rational to develop training plans and support for the committee and the pilots. The pilots will be running over the next six to eight months, with full implementation of the tailored framework to follow across the bureau. For more information about the Rational process or tool suite, call Corinne Steele at 617-626-4499.

## INFORMATION TECHNOLOGY DIVISION

One Ashburton Place, Room 801  
Boston, MA 02108

ITD's Strategic Planning Group, Val Asbedian Director, publishes this quarterly Information Technology Bulletin. One of the SPG's tasks is to act as a clearinghouse for IT information. This publication furthers that goal. Please send correspondence to Managing Editor, Elaine Socha, the Information Technology Bulletin, Room 801, One Ashburton Place, Boston, MA 02108

Voice: (617) 626-4425  
FAX: (617) 727-3766  
Email: Elaine.Socha@state.ma.us

This publication is available on the public Internet at  
<http://www.state.ma.us/itd/publications.htm>, and on the state's intranet at  
<http://www.itd.state.ma.us/publications.htm>.

Photos by Tom Buchanan, Sylvia Kauffman,  
Peter Klim and Jerry Shereda

Presorted  
First Class  
U.S. Postage Paid  
Permit No. 2226  
Worcester, MA

\*\*\*\*\*SNGLP  
SNGLP  
UMass - W.E.B. DuBois Library  
Leonard Adams  
GOVERNMENT DOCUMENTS  
AMHERST MA 01003



Printed on Recycled Paper

If any part of the address on this newsletter is incorrect, mark the changes on a photocopy and send or fax the copy using the information in the upper left.

## A MESSAGE FROM THE CIO

This issue of the Information Technology Bulletin might appear to be blind to the events of September 11<sup>th</sup> combined with the fiscal crisis — but it isn't. The principle of cooperation and collaboration for a more intuitive electronic government is now more crucial than ever. Whether we're thinking about infrastructure, interagency service, or service to our constituents, we need to do more with less. For example, September 11<sup>th</sup> illustrates that our network design and the lack of a second data center contribute to the potential vulnerability of our systems. It is clear that our network is not redundant and that we do not have a back-up data center. The only way we can afford to solve these two particular issues will be through cooperation and collaboration. Further, if Massachusetts is going to continue to attract and foster the numerous start-up businesses that fueled the economy in the past, we need to recognize that we are competing with other states for that business. We will never be the lowest cost location for a business but we can offer a government that is coherent and easy to do business with. In this way we will minimize the mystery of government and government process to the advantage of all. With the introduction of the new portal, we have taken a step towards this goal, and set in motion higher expectations for our business users.

ITD is still working to get IT Bond III passed so we can continue with high pay-off projects during these tough times. We have to use the current downturn as an additional and compelling reason to continue to move forward.

David Lewis













